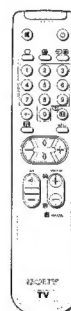
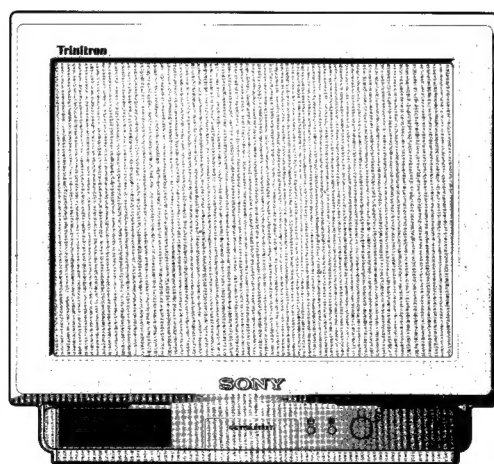


SERVICE MANUAL

BE-4A CHASSIS

| MODEL | COMMANDER | DEST. | CHASSIS NO. | MODEL | COMMANDER | DEST. | CHASSIS NO. |
|-----------|-----------|---------|-------------|------------|-----------|---------|-------------|
| KV-M2170A | RM-836 | Italian | SCC-J05B-A | KV-M2170K | RM-836 | OIRT | SCC-J03B-A |
| KV-M2171A | RM-836 | Italian | SCC-J05A-A | KV-M2171K | RM-836 | OIRT | SCC-J03A-A |
| KV-M2170B | RM-836 | French | SCC-J06A-A | KV-M2171KR | RM-836 | Russian | SCC-J03C-A |
| KV-M2171B | RM-836 | French | SCC-J06B-A | KV-M2170L | RM-836 | Irish | SCC-J02B-A |
| KV-M2170D | RM-836 | AEP | SCC-J08A-A | KV-M2171L | RM-836 | Irish | SCC-J02A-A |
| KV-M2171D | RM-836 | AEP | SCC-J08B-A | KV-M2170U | RM-836 | UK | SCC-J01B-A |
| KV-M2170E | RM-836 | Spanish | SCC-J04B-A | KV-M2171U | RM-836 | UK | SCC-J01A-A |
| KV-M2171E | RM-836 | Spanish | SCC-J04A-A | | | | |



TRINITRON® COLOR TV
SONY®



| ITEM | MODEL | Television System | Channel Coverage | Colour System |
|-----------------|----------|---|------------------|---|
| Italian | B/G/H | VHF: E2-E12, S1-S20 UHF: E21-E69 | | PAL |
| French | B/G/H, L | VHF: E2-E12, S1-S20, S21-S41, F2-F10, B-Q UHF: E21-E69, F21-F69 | | PAL, SECAM |
| AEP | B/G/H | VHF: E2-E12, S1-S20, S21-S41 UHF: E21-E69 | | PAL, SECAM |
| Spanish | B/G/H | VHF: E2-E12, S1-S20, S21-S41 UHF: E21-E69 | | PAL |
| OIRT Russian | B/G, D/K | B/G VHF: E2-E12 UHF: E21-E69 Hyper: S1-S41 (KV-M2170K/M2171K) Super: S1-S20 (KV-M2171KR) D/K VHF: R01-R12 UHF: R21-R69 | | PAL, SECAM NTSC3.58/4.43 (video input only) |
| Irish UK | I | VHF: A-J (KV-M2170L/M2171L) UHF: 21-69 Hyper: S1-S41 (KV-M2170L/M2171L) | | PAL |

| MODEL | Italian | French | AEP | Spanish | OIRT Russian | Irish UK |
|-------------------|---------|--------|-----|---------|-----------------|-------------|
| Power Consumption | 58W | 58Wh | 58W | 58W | 58W | 75W |

SPECIFICATIONS

Picture Tube Hi-Black Trinitron
 Approx. 55 cm (21 inches)
 (Approx. 51 cm picture measured
 diagonally)
 100° -deflection

Input/Output Terminals

[INPUTS]

21-pin connector (CENELEC standard)

- audio / video input
- RGB input

[OUTPUTS]

Ω Headphone jack : minijack

Sound output 4W (RMS)
 5W (music power)

Dimensions 513x475x475 mm approx.

Weight Approx. 21.0kg

Supplied accessories RM-836 Remote Commander (1)
 IEC designated batteries (2)

Other features TELETEXT (KV-M2171A/M2171B/M2171D/M2171E/M2171K/M2171KR/M2171L/M2171U)


[RM-836]

Remote control system infrared control
 Power requirements 3V dc (2 batteries) R6 (size AA)
 Dimensions Approx. 210x45x24 mm (w/h/d)
 Weight Approx. 90g (Not including batteries)

Design and specifications are subject to change without notice.

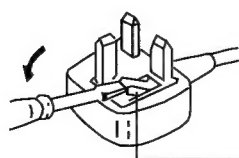
| Model name Item | KV-M2170A KV-M2171A | KV-M2170B KV-M2171B | KV-M2170D KV-M2171D | KV-M2170E KV-M2171E | KV-M2170K KV-M2171K KV-M2171KR | KV-M2170L KV-M2171L KV-M2170U KV-M2171U |
|--------------------|------------------------|------------------------|------------------------|------------------------|--------------------------------------|--|
| Pal Comb | OFF | OFF | OFF | OFF | OFF | OFF |
| PIP | OFF | OFF | OFF | OFF | OFF | OFF |
| RGB Priority | ON | ON | ON | ON | ON | ON |
| Woofer Box | OFF | OFF | OFF | OFF | OFF | OFF |
| Scart 1 | ON | ON | ON | ON | ON | ON |
| Scart 2 | OFF | OFF | OFF | OFF | OFF | OFF |
| Front in (3) | OFF | OFF | OFF | OFF | OFF | OFF |
| Scart 4 | OFF | OFF | OFF | OFF | OFF | OFF |
| Projector | OFF | OFF | OFF | OFF | OFF | OFF |
| AKB in 16:9 mode | OFF | OFF | OFF | OFF | OFF | OFF |
| Norm B/G/H | ON | ON | ON | ON | ON | OFF |
| Norm I | OFF | OFF | OFF | OFF | OFF | ON |
| Norm D/K | OFF | OFF | OFF | OFF | ON | OFF |
| Norm AUS | OFF | OFF | OFF | OFF | OFF | OFF |
| Norm L | OFF | ON | OFF | OFF | OFF | OFF |
| Norm SAT | OFF | OFF | OFF | OFF | OFF | OFF |
| Norm M | OFF | OFF | OFF | OFF | OFF | OFF |
| Language Preset | Italian | French | German | Spanish | OIRT | English |

WARNING (KV-M2170L/M2171L/M2170U/M2171U only)

The flexible mains lead is supplied connected to a **B.S. 1363** fused plug having a fuse of **5 AMP** capacity. Should the fuse need to be replaced, use a **5 AMP FUSE** approved by **ASTA** to **BS 1362**, ie one that carries the  mark.

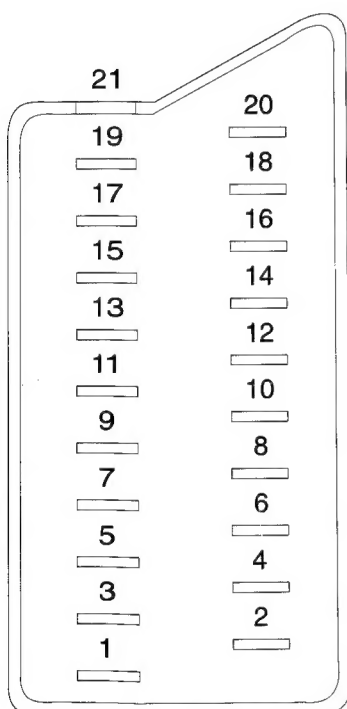
IF THE PLUG SUPPLIED WITH THIS APPLIANCE IS NOT SUITABLE FOR YOUR SOCKET OUTLETS IN YOUR HOME. IT SHOULD BE CUT OFF AND AN APPROPRIATE PLUG FITTED. THE PLUG SEVERED FROM THE MAINS LEAD MUST BE DESTROYED AS A PLUG WITH BARED WIRES IS DANGEROUS IF ENGAGED IN A LIVE SOCKET OUTLET.

When an alternative type of plug is used it should be fitted with a **5 AMP FUSE**, otherwise the circuit should be protected by a **5 AMP FUSE** at the distribution board.



How to replace the fuse.
 Open the fuse compartment with the screwdriver blade and replace the fuse.

21 pin connector (②-1)



| Pin No | | Signal | Signal level |
|--------|---|------------------------------|--|
| 1 | ○ | Audio output B (right) | Standard level: 0.5Vrms Output impedance: less than 1kohm* |
| 2 | ○ | Audio input B (right) | Standard level: 0.5Vrms Input impedance: More than 10kohms* |
| 3 | ○ | Audio output A (left) | Standard level: 0.5Vrms Output impedance: less than 1kohm* |
| 4 | ○ | Ground (audio) | |
| 5 | ○ | Ground (blue) | |
| 6 | ○ | Audio input A (left) | Standard level: 0.5Vrms Input impedance: More than 10kohms* |
| 7 | ○ | Blue input | 0.7V±3dB, 75ohms, positive |
| 8 | ○ | Function select (AV control) | High state (9.5—12V): Part mode Low state (0—2V): TV mode Input impedance: More than 10kohms Input capacitance: Less than 2nF |
| 9 | ○ | Ground (green) | |
| 10 | ○ | Open | |
| 11 | ○ | Green | Green signal: 0.7V±3dB. 75ohms, positive |
| 12 | ○ | Open | |
| 13 | ○ | Ground (red) | |
| 14 | ● | Ground (blanking) | |
| 15 | ○ | Red input | 0.7V±3dB, 75ohms, positive |
| | — | (S signal) chroma input | 0.3V±3dB, 75ohms, positive |
| 16 | ○ | Blanking input (Ys signal) | High state (1—3V) Low state (0—0.4V) Input impedance: 75ohms |
| 17 | ○ | Ground (video output) | |
| 18 | ○ | Ground (video input) | |
| 19 | ○ | Video output | 1V±3dB, 75ohms, positive Sync: 0.3V(—3, +10dB) |
| 20 | ○ | Video input | 1V±3dB, 75ohms, positive Sync: 0.3V(—3, +10dB) |
| | — | Video Input/Y (S signal) | 1V±3dB, 75ohms, positive Sync: 0.3V(—3, +10dB) |
| 21 | ○ | Common ground (plug, shield) | |

○ Connected ● Not Connected (open) * at 20Hz - 20kHz

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CAUTION

SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR CARBON PAINTED ON THE CRT, AFTER REMOVING THE ANODE.

WARNING !!

AN ISOLATION TRANSFORMER SHOULD BE USED DURING ANY SERVICE TO AVOID POSSIBLE SHOCK HAZARD, BECAUSE OF LIVE CHASSIS.
THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND MARK  ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND, IN THE PARTS LIST ARE CRITICAL FOR SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.


ATTENTION

APRES AVOIR DECONNECTE LE CAP DE L'ANODE, COURT-CIRCUITER L'ANODE DU TUBE CATHODIQUE ET CELUI DE L'ANODE DU CAP AU CHASSIS METALLIQUE DE L'APPAREIL, OU AU COUCHE DE CARBONE PEINTE SUR LE TUBE CATHODIQUE OU AU BLINDAGE DU TUBE CATHODIQUE.

ATTENTION !!

AFIN D'EVITER TOUT RISQUE D'ELECTROCUTION PROVENANT D'UN CHÂSSIS SOUS TENSION, UN TRANSFORMATEUR D'ISOLEMENT DOIT ETRE UTILISÉ LORS DE TOUT DÉPANNAGE. LE CHÂSSIS DE CE RÉCEPTEUR EST DIRECTEMENT RACCORDÉ À L'ALIMENTATION SECTEUR.

ATTENTION AUX COMPOSANTS RELATIFS À LA SÉCURITÉ!!

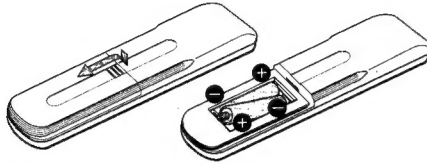
LES COMPOSANTS IDENTIFIÉS PAR UNE TRAME ET PAR UNE MARQUE  SUR LES VUES EXPLOSÉES ET LES LISTES DE PIÈCES SONT D'UNE IMPORTANCE CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT. NE LES REMPLACER QUE PAR DES COMPOSANTS SONY DONT LE NUMÉRO DE PIÈCE EST INDICUÉ DANS LE PRÉSENT MANUEL OU DANS DES SUPPLÉMENTS PUBLIÉS PAR SONY.

SECTION 1 GENERAL

Getting Started

Step 1

Inserting the Batteries into the Remote Commander



Step 2

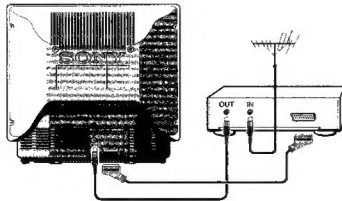
Connecting the Aerial

If you connect a VCR, skip to step 3.

Connect an external aerial to the socket .

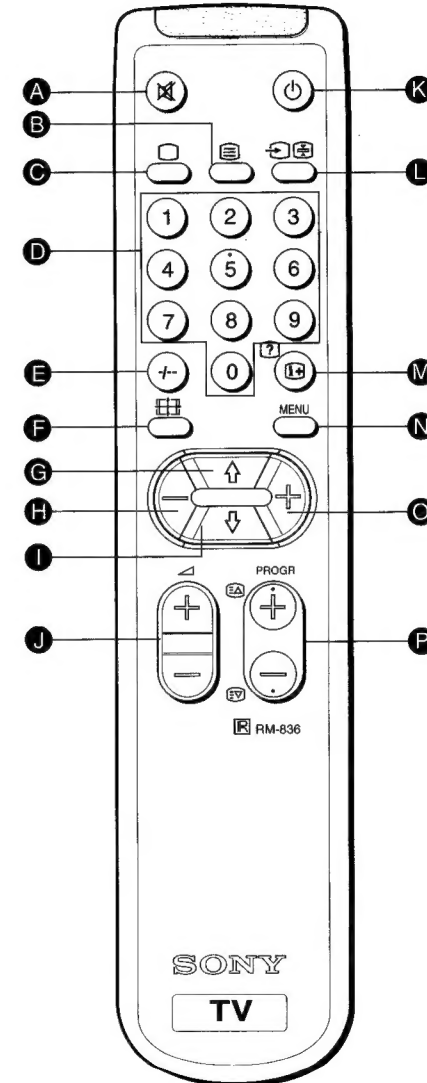
Step 3

Connecting a VCR



It is recommended to tune in the VCR signal to programme number "0". For details, see "Presetting Channels Manually" on page 12.

The operating instructions mentioned here are partial abstracts from the Operating Instruction Manual. The page numbers of the Operating Instruction Manual remain as in the manual.

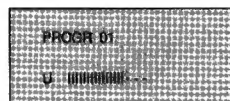


Step 4

Presetting Channels Automatically

TV searches for all available channels. If manual tuning is preferred see Menu option - Presetting Channels Manually.

- 1 Plug into mains.
Press power switch **⏻** on TV set.
- 2 Press and hold **▶▶** **S** on TV set for 2 seconds.
Auto tuning starts and screen shows.



- Notes**
- When Auto tuning stops the programme on position 1 is seen.
 - KV-M2171U/M2171L only – channels are automatically stored as follows:

| KV-M2171U | KV-M2171L |
|------------------------|------------|
| Programme 1 BBC1 | RTE1 |
| Programme 2 BBC2 | RTE2 |
| Programme 3 ITV | BBC1 |
| Programme 4 CH4 or S4C | BBC2 |
| Programme 5 – | ITV |
| Programme 6 – | CH4 or S4C |

TV Operation

TV Operation

This section explains functions used whilst watching TV. Most operations are carried out using the Remote Commander.

| To | Press |
|------------------------------|---|
| Switch on | ⏻ W on TV |
| Switch off temporarily | ⏻ K <i>TV is now in standby mode, ⏻ indicator V on TV lights.</i> |
| Switch on again | ⏻ C , PROGR +/- P U or any number button D |
| Switch off completely | ⏻ W on TV <i>To save energy we recommend switching off completely when TV is not in use.</i> |
| Select programmes | PROGR +/- P U or number buttons D <i>For double digit numbers press -/-- E then the number e.g. For 23, press -/-- E then 2 and 3.</i> |
| Display the programme number | ⏻ M <i>Press again to make programme number disappear.</i> |
| Adjust the volume | ⏻ +/- J T |
| Mute the sound | ⏻ A <i>Press again to restore sound.</i> |
| View video input | ⏻ L R <i>Press again to return to TV programme.</i> |
| View programmes in 16:9 mode | ⏻ F <i>Press again to return to 4:3 mode.</i> |

Teletext Operation (only for KV-M2171U/M2171L)

Viewing Teletext

Teletext is an information service broadcast by TV stations.

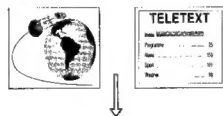
- 1 Select the channel which carries the teletext service you wish to receive.
- 2 Press **⏏** **B** to switch on teletext.
- 3 Input three digits for the page number using the programme number buttons **0-9** or **PROGR +/-** **0-9**.
- 4 Press **⏏** **C** to switch off teletext.

Note • Teletext errors may occur if the broadcasting signals are weak.

Using Other Teletext Functions

Superimposing teletext on the TV

Press **⏏** **B** once in teletext mode or twice in TV mode to superimpose teletext on the TV screen.
Press **⏏** **B** again to cancel superimposing.



Freezing a teletext subpage

Press **⏏** **L** (HOLD) to freeze the subpage. Freezing the page prevents the information that is displayed from being updated.
Press **⏏** **L** to cancel HOLD and allow update to continue.



Revealing concealed information (eg: answers to a quiz)

Press **?** **M** to reveal information.
Press again to conceal the information.

Using colour buttons to access pages

When the colour coded menu appears at the bottom of a page, press the colour button (red, green, blue or yellow) **GHI O** to access the corresponding page.

Note • A programme status message in a blue box may appear when you change programmes (depends on broadcasters).

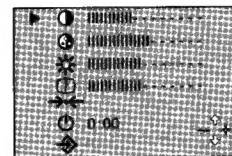
MENU Operation

Use buttons on Remote Commander to control Menu screen.

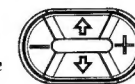


MENU **N**
Menu Screen
on/off

Green **G**
scroll up



Red **H**
decrease



Yellow **O**
increase/confirm(OK)

Blue **I**
scroll down

Adjusting the Picture

- 1 Press **MENU** **N**.
- 2 Press **Green** **G** or **Blue** **I** button to select the item you wish to change.

| Symbol | Item | - | Effect | + |
|----------|------------|--------|----------|---|
| I | Picture | Less | More | |
| G | Colour | Less | More | |
| * | Brightness | Darker | Brighter | |
| I | Sharpness | Softer | Sharper | |

- 3 Press **Red** **H** or **Yellow** **O** button to change levels.

- 4 Press **MENU** **N** to return to normal TV screen.

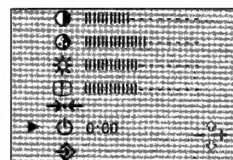
Note • To reset to factory preset picture levels, press **Green** **G** or **Blue** **I** button to select **↔** and press **Yellow** (OK) **O** button.

Using the Sleep Timer

The TV may be set to switch to the standby mode automatically after a length of time chosen by you. You may set the time in 30 minutes steps up to 4 hours.

1 Press MENU **N**.

2 Press green **G** or blue **I** button to select **U**.



3 Press red **H** or yellow **O** button to set time delay.
0.00 (OFF) 0.30 1.00 1.30 4.00

4 Press MENU **N** to return to normal TV screen.
When watching TV, press **⏮** **M** to display time remaining.

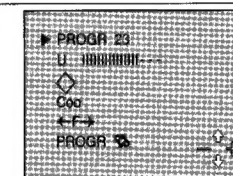
Presetting Channels Manually

Up to 60 programme positions are available for presetting channels.

1 Press MENU **N**.

2 Press green **G** or blue **I** button to select **⇨** and press yellow (OK) **O** button.

3 Select programme number using PROGR +/- **P** **U** or the number buttons **D**.



4 Press green **G** or blue **I** button to select tuning bar (|||||....) and press red **H** or yellow **O** button to start channel search. When a channel is found the tuning bar stops moving and you see the picture.

5 If you want to store, press green **G** or blue **I** button to select **◇** and press yellow (OK) **O** button. If you do not want to store, press red **H** or yellow **O** button to continue search.

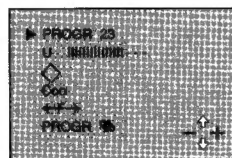
6 Repeat steps 3 to 5 for all other channels.

7 Press MENU **N** to return to normal TV screen.

Skiping Programme Positions

You can skip unused programme positions when selecting channels with the PROGR +/- **P** **U** buttons. You can still select them, however, using the number buttons **0**.

- 1 Press MENU **N**.
- 2 Press green **G** or blue **I** button to select ⇨ and press yellow **0** button.
- 3 Select programme number you want to skip using PROGR +/- **P** **U** button or number buttons **0**.
- 4 Press green **G** or blue **I** button to select Coo and press yellow (OK) **0** button.
- 5 Press green **G** or blue **I** button to select ◇ and press yellow (OK) **0** button to store.
- 6 Repeat steps 3 to 5 for other unused programme positions.
- 7 Press MENU **N** to return to normal TV screen.

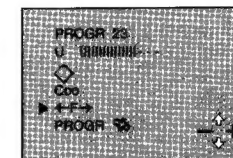


Note • To restore a skipped programme number, refer to "Presetting Channels Manually".

Fine-Tuning Channels

You can fine tune a stored channel if necessary.

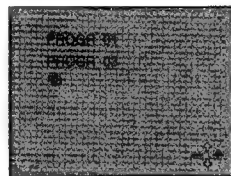
- 1 Select the channel you wish to fine tune.
- 2 Press MENU **N**.
- 3 Press green **G** or blue **I** button to select ⇨ and press yellow (OK) **0** button.
- 4 Press green **G** or blue **I** button to select ⇨F⇨ and use red **H** or yellow **0** button to adjust tuning.
- 5 Press green **G** or blue **I** button to select ◇ and press yellow (OK) **0** button to store.
- 6 Press MENU **N** to return to normal TV screen.



Exchanging Programme Positions

After tuning you may wish to rearrange the programme positions.

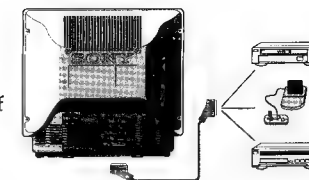
- 1 Press MENU **N**.
- 2 Press green **G** or blue **B** button to select ⇨ and press yellow (OK) **O** button.
- 3 Press green **G** or blue **B** button to select **PROGR** and press yellow (OK) **O** button.
- 4 Press red **H** or yellow **O** button to select the first programme position.
- 5 Press the blue **B** button.
- 6 Press the red **H** or yellow **O** button to select the second programme position.
- 7 Press blue **B** button to select **EX** and press yellow (OK) **O** button to exchange.
- 8 Repeat steps 4 to 7 for other programme positions.
- 9 Press MENU **N** to return to normal TV screen.



Optional Connections

Using the 21-pin Connector

Your TV has one 21-pin connector **Y** on the rear of the set. You can connect optional audio or video equipment to this connector, such as a VCR, video games or a video disc player.



- 1 Press **⇨** **L** **R** to view the video input signal.
- 2 Press **⇨** **L** **R** or **O** **C** to return to normal TV screen.

Connecting Headphones

Plug in the headphones to the **Ω** **C** socket on the front of the TV set, then the sound from the speaker is muted.

Additional Information

Troubleshooting

Here are some simple solutions to the problems which affect the picture and sound.

| Problem | Solution |
|---|---|
| No picture, screen is dark, no sound | <ul style="list-style-type: none"> Plug the TV in. Press W on the TV. Press C or the programme number D on the remote commander if U indicator V is on. Check the aerial connection. Check that the video source is on. Turn the TV off for 3 or 4 seconds and then turn it on again using W. |
| Poor or no picture (screen is dark, sound is good) | <ul style="list-style-type: none"> Press MENU N and adjust brightness picture and colour levels. |
| Good picture, no sound | <ul style="list-style-type: none"> Adjust the volume \triangleleft \triangleleft \triangleleft T. Disconnect any headphones. Press A if A is displayed on the screen. |
| No colour on colour programmes | <ul style="list-style-type: none"> Press MENU N and adjust colour balance. Press MENU N and reset to factory settings. |
| Distorted picture when you change programmes or select teletext | <ul style="list-style-type: none"> Turn off the equipment connected to the 21-pin connector Y. |
| Remote commander does not function | <ul style="list-style-type: none"> Replace the batteries. |

• If you continue to have these problems, have your TV serviced by qualified personnel.
 • NEVER open the casing yourself.

Specifications

TV system

I

Colour system

PAL

Channel coverage

KV-M2170L/M2171L
 UHF 21-69
 VHF A-J
 Hyper S1-S41
 KV-M2170U/M2171U
 UHF 21-69

Picture tube

HiBlack Trinitron
 Approx 54.5 cm (21 inches) (Approx 51 cm
 picture measured diagonally)

Inputs

21-pin connector (CENELEC standard)
 including audio/video input, RGB input

Outputs

Headphone jack - minijack

Sound output:

4W (RMS)
 5W (music power)

Power consumption

75W

Dimensions (wxhxd)

513x475x475mm approx.

Weight

21 kg

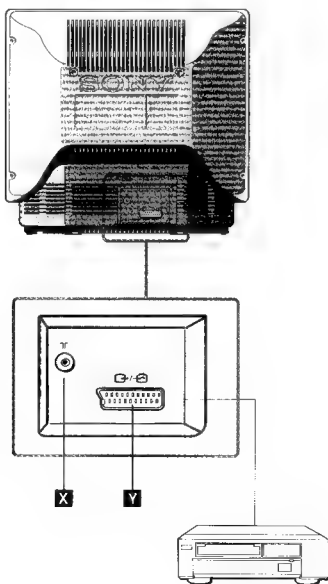
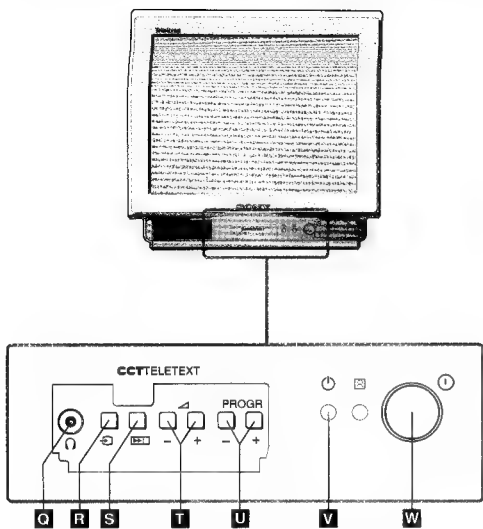
Accessories supplied

RM-836 Remote Commander (1)
 IEC designated batteries (2)

Other features

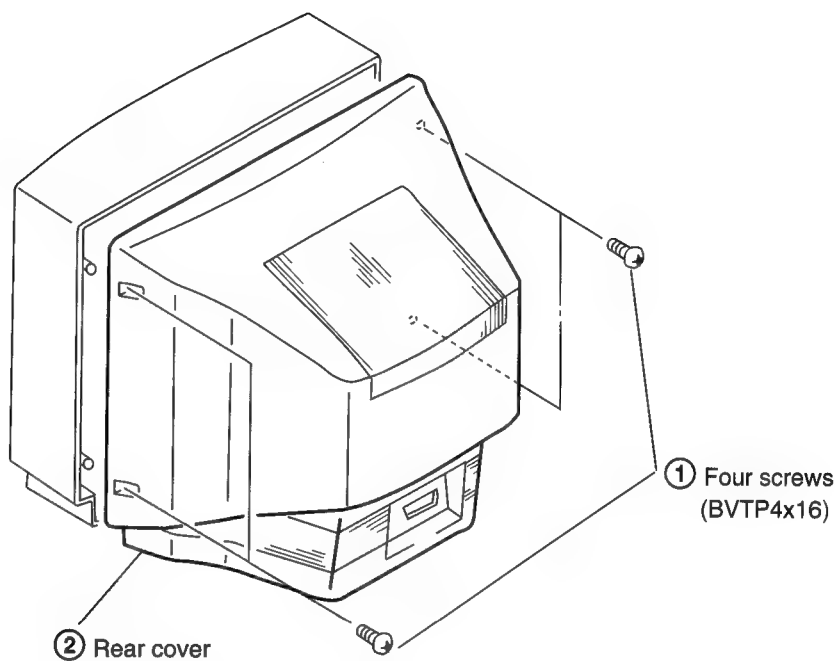
TELETEXT (for KV-M2171U/M2171L)

• Design and specifications are subject to change without notice.

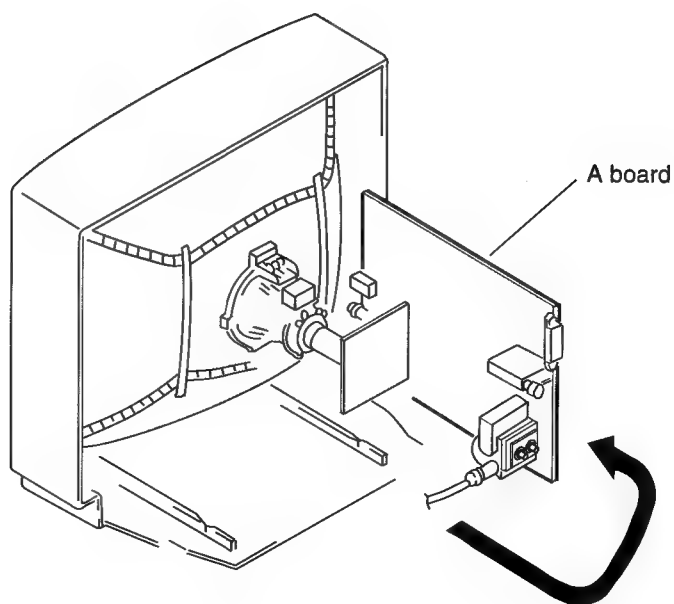


SECTION 2 DISASSEMBLY

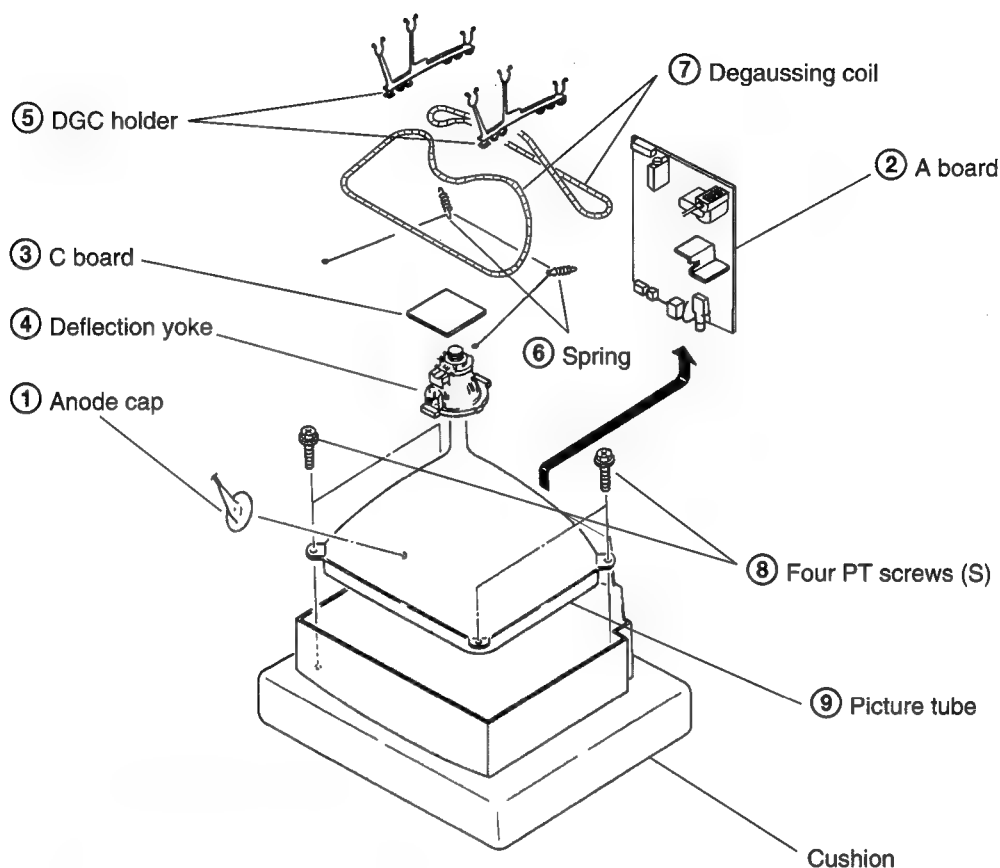
2-1. REAR COVER REMOVAL



2-2. SERVICE POSITION



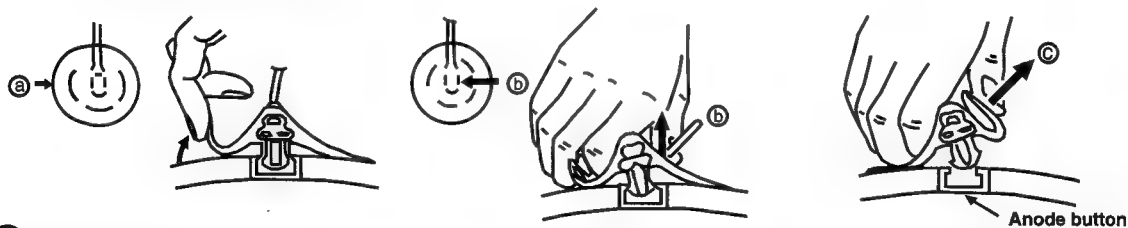
2-3. PICTURE TUBE REMOVAL



• REMOVAL OF ANODE-CAP

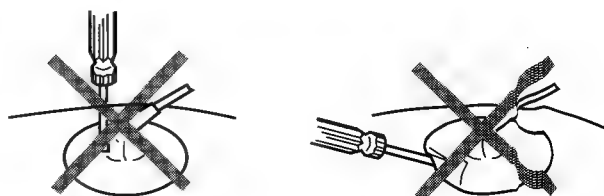
Note: Short circuit the anode of the picture tube and the anode cap to the metal chassis, CRT shield or carbon paint on the CRT, after removing the anode.

* REMOVING PROCEDURES.



• HOW TO HANDLE AN ANODE-CAP

- ① Don't damage the surface of anode-cap with sharp shaped material !
- ② Don't press the rubber hardly not to hurt inside of anode-caps !
A metal fitting called as shatter-hook terminal is built into the rubber.
- ③ Don't turn the foot of rubber over hardly !
The shatter-hook terminal will stick out or damage the rubber.



SECTION 3

SET-UP ADJUSTMENTS

- The following adjustments should be made when a complete realignment is required or a new picture tube is installed.
- These adjustments should be performed with the rated power supply voltage, unless otherwise noted.

The Contrast and Brightness controls should be set as follows unless otherwise noted:

- CONTRAST control 80%
(or Normal by commander)
- ☼ BRIGHTNESS control 50%

Perform the adjustments in the following order:

1. Beam Landing
2. Convergence
3. Screen (G2), Drive, White Balance, Sub Colour and Sub Brightness.
4. Focus

Note: Test Equipment Required.

1. Colour bar/Pattern Generator
2. Degausser
3. DC Power Supply
4. Digital multimeter
5. Oscilloscope

Preparation:

- In order to reduce the influence of external magnetic forces on the picture tube, face the TV set in an easterly or westerly direction.
- Turn the power switch for the unit ON and erase the magnetic force using a degausser.

3-1. BEAM LANDING

Demagnetize with a degausser.

1. Input an all white raster signal from the pattern generator.
 CONTRAST } normal
 BRIGHTNESS }
2. Switch the raster signal of the pattern generator to Red.
3. Move the deflection yoke backward, and adjust with the purity control so that Red is at the centre and the Blue and Green are evenly spaced at the sides. see (Fig. 3-1 - 3-3)
4. Move the deflection yoke forward, and adjust so that the entire screen becomes Red. (Fig. 3-1)
5. Switch the raster signal to Blue and then Green to confirm the condition.
6. When the position of the deflection yoke has been determined, tighten it with the deflection yoke mounting screw.
7. When the landing at the corners is not correct, adjust by using disk magnets. (Fig. 3-4)

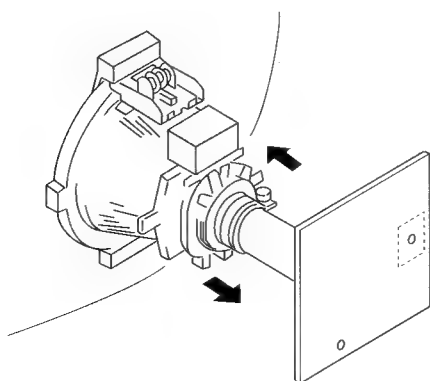


Fig. 3-1

Fig. 3-2

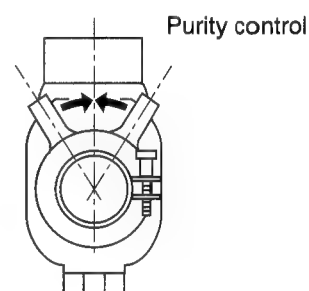


Fig. 3-3

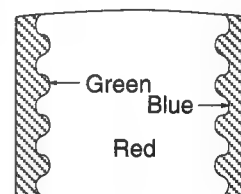
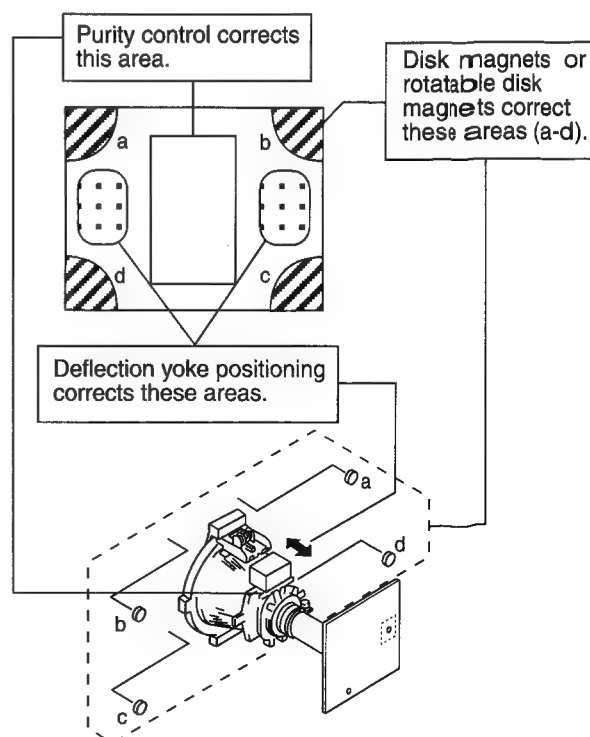


Fig. 3-4

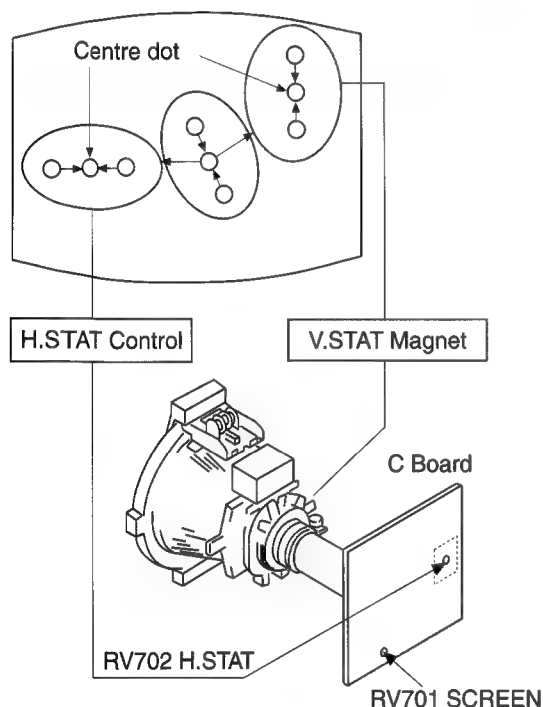


3-2. CONVERGENCE

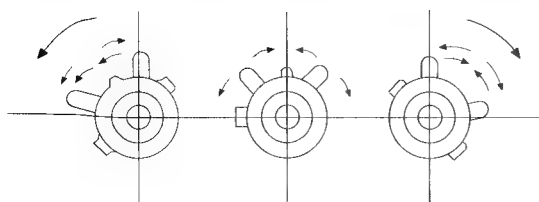
Preparation:

- Before starting, perform FOCUS, H.SIZE, and V.SIZE adjustments.
- Set the BRIGHTNESS control to minimum.
- Input a dot pattern from the pattern generator.

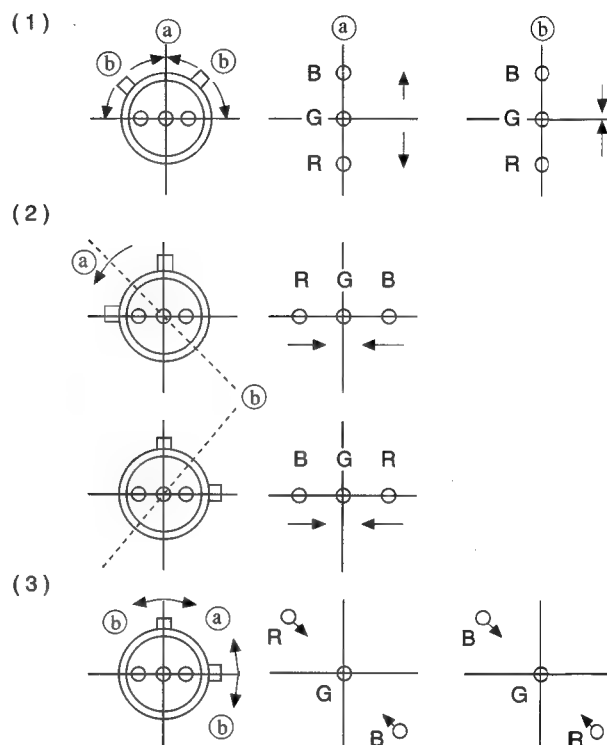
(1) Horizontal and Vertical Static Convergence



1. Adjust the H.STAT control to converge the Red, Green and Blue dots at the centre of the screen. (Horizontal movement)
 2. Adjust the V.STAT magnet to converge the Red, Green and Blue dots at the centre of the screen. (Vertical movement)
- If the horizontal dots cannot coincide with variable range of the H.STAT convergence, adjust together with the V.STAT convergence while tracking.
(Adjust the convergence by tilting the V.STAT convergence or by opening or closing the V.STAT convergence.)



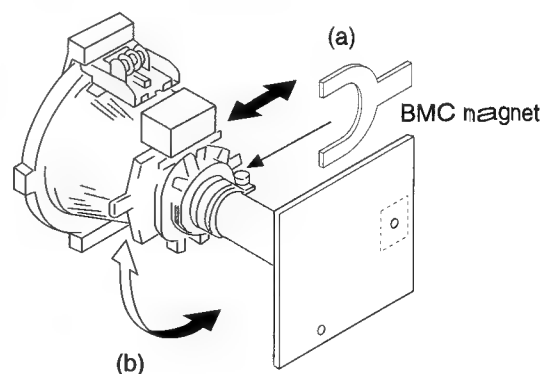
3. When the V.STAT magnet is moved in the direction of the (a) and (b) arrows, the Red, Green and Blue dots move as shown below.



If the Red and Blue dots do not converge with the Green dots, perform the following steps.

1. Move the BMC magnet (a) to correct for insufficient H.static convergence.
2. Rotate the BMC magnet (b) to correct for insufficient V.static convergence.

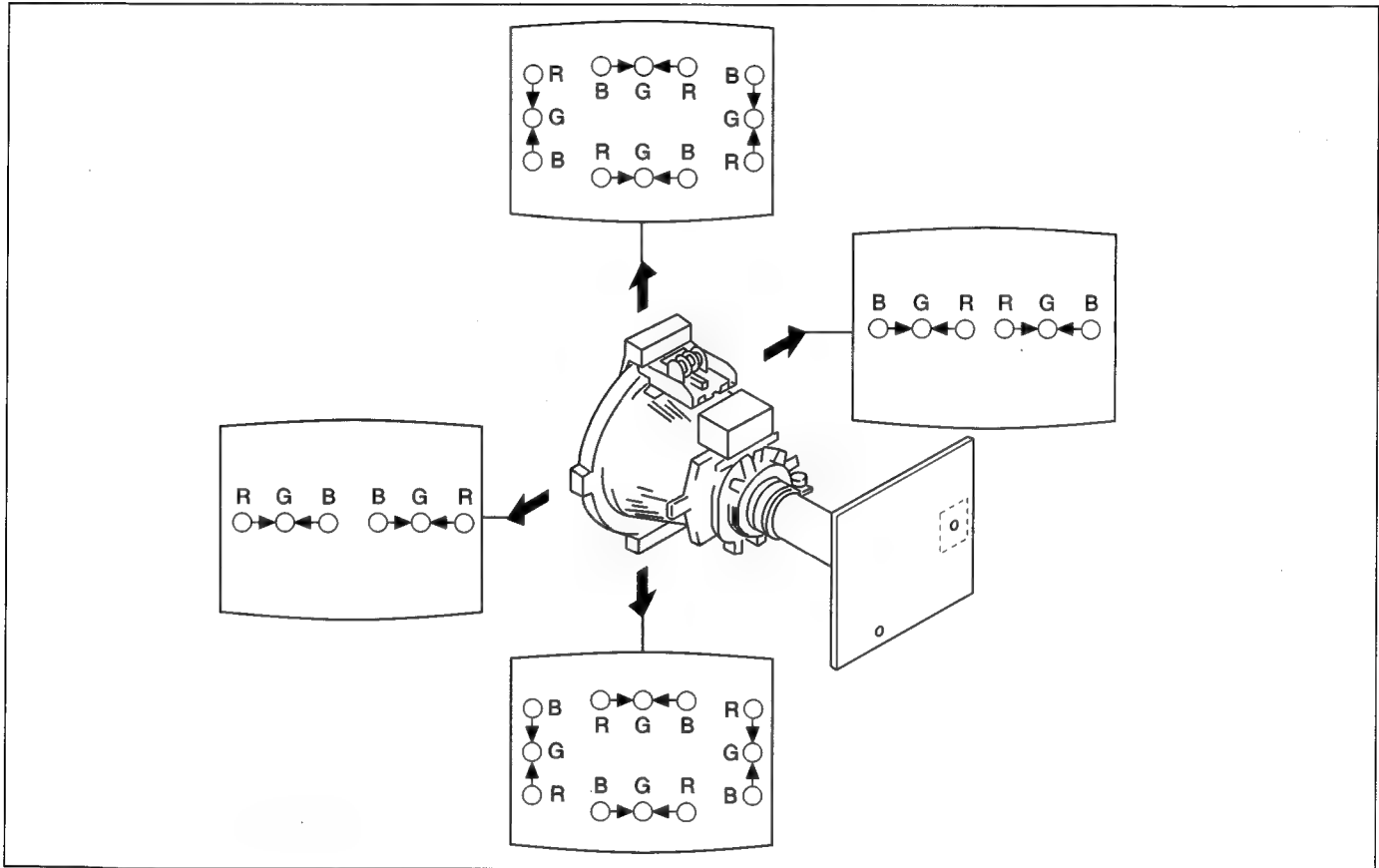
In either case, repeat the Beam Landing Adjustment.



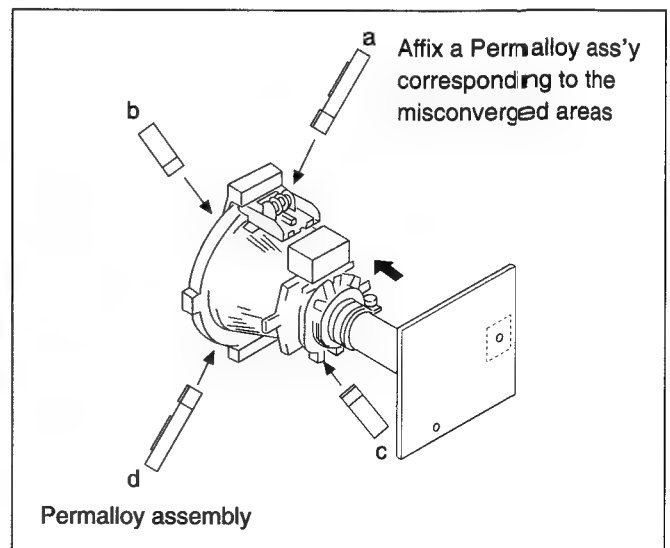
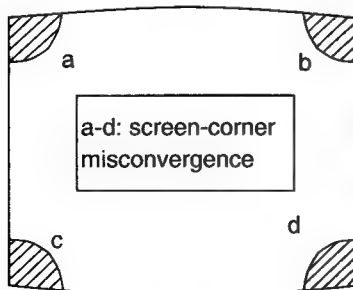
(2) Dynamic Convergence Adjustment

Preparation:

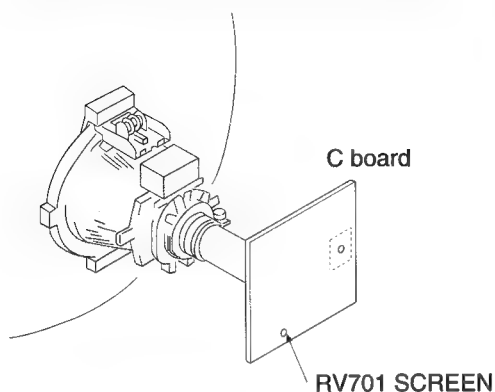
- Before starting to perform the Horizontal and Vertical static convergence adjustment.
1. Slightly loosen the deflection yoke screw.
 2. Remove the deflection yoke spacers.
 3. Move the deflection yoke for best convergence as shown below.
 4. Tighten the deflection yoke screw.
 5. Install the deflection yoke spacers.



(3) Screen-corner Convergence.



3-3. SCREEN (G2), DRIVE, WHITE BALANCE, SUB COLOUR and SUB BRIGHTNESS.

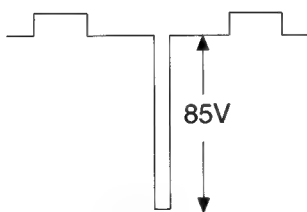


Screen (G2) setting

1. Input a 0 IRE (Black Level) signal from the pattern generator.
2. Enter into the Service Mode "Test""Test" and 38.
3. Adjust RV701 until the Down arrow is displayed.
4. Adjust RV701 until the Down arrow just disappears.
5. Press the TV Button on the Remote Commander to store the data.

Drive Level

1. Input a Video signal containing a small area of 100% white on a black background.
2. Connect an oscilloscope to Pin (10) of J701 (R OUT) on the C Board.
3. Set the Picture to maximum using "Test""Test" and 01.
4. Enter into the Service mode (Adjust Menu).
5. Using the Blue and Green buttons select "RED HWB".
6. Using the Red and Yellow buttons on the Remote Commander adjust until the oscilloscope waveform has an amplitude of 85V.

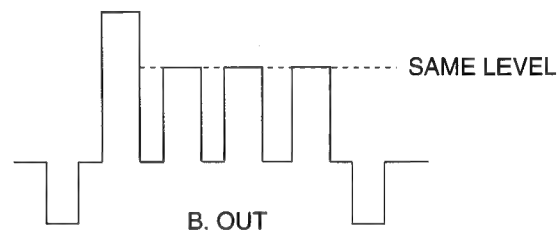


White Balance Adjustment

1. Input an all white pattern from the pattern generator.
2. Adjust the Colour and Brightness controls to the standard level.
3. Enter into the Service Mode.
4. Adjust the Green HWB and Blue HWB so that the White Balance becomes optimum.

Sub Colour Adjustment

1. Input a PAL colour bar pattern from the pattern generator.
2. Connect an oscilloscope to Pin (8) of J701 (B OUT) on the C Board.
3. Enter into the Service Mode "Test""Test" and 22.
4. Using the Red and Yellow buttons on the Remote Commander adjust until the oscilloscope waveform becomes as follows :



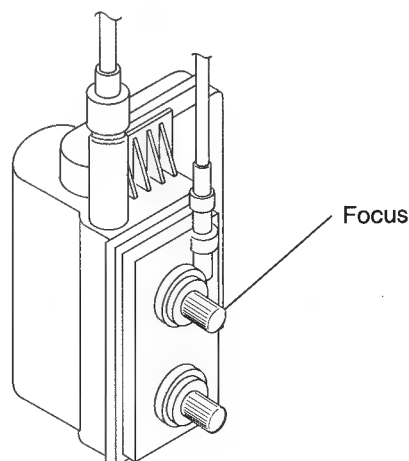
Note : If the TV is able to receive PAL and SECAM transmissions, repeat the above procedure using a Secam colour bar signal.

Sub Brightness Adjustment

1. Input a Philips pattern from the pattern generator.
2. Enter into the Service Mode "Test""Test" and 23.
3. Using the Red and Yellow buttons on the Remote Commander adjust until the 0 IRE of the grey scale and the cut off are only slightly visible on the screen.

3-4. FOCUS

1. Receive a television broadcasting.
2. Normalize the picture setting.
3. Adjust the focus control on the flyback transformer to become the focus in the centre area properly.
Bring only the centre area of the screen into focus, the magenta-ring appears on the screen. In this case, adjust the focus to optimize the screen uniformly.



SECTION 4

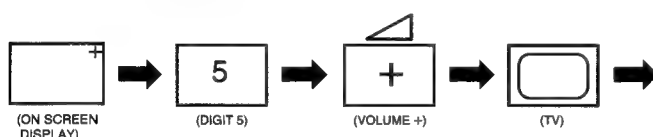
CIRCUIT ADJUSTMENTS

4-1. ELECTRICAL ADJUSTMENTS

Service adjustment to this model can be performed with the supplied Remote Control Commander RM-836.

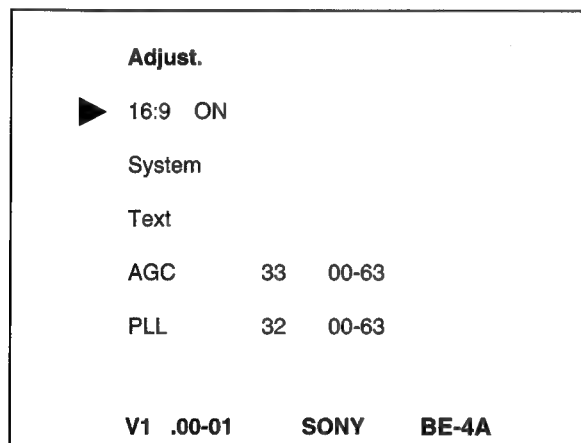
HOW TO ENTER INTO SERVICE MODE

1. Turn on the main power of the set and enter into stand-by mode.
2. Press the following sequence of buttons on the Remote Control Commander.



"TT--" will appear in the top right corner of the screen
Other status information will also be displayed.

3. Press the MENU button on the Remote Commander to obtain the menu on the screen.



Software version

Range of adjustments available from the on screen menu system.

| Adjustment | Set | Range |
|--------------|--------|-----------------------------|
| 16:9 Off | Select | ON/OFF |
| System | Select | BG-L, BG-DK UK, Eire, BG |
| Text | Select | EAST/WEST |
| AGC | Adj. | 00 - 63 |
| PLL | Adj. | 00 - 63 |
| B&W Delay | Adj. | 00 - 63 |
| Ver Size | Adj. | 00 - 63 |
| Ver, Breath | 00 | 00 - 63 |
| Par, Ampl | 00 | 00 - 63 |
| Par, Tilt | 32 | 00 - 63 |
| V, Linear | Adj. | 00 - 63 |
| Corn, corr | 00 | 00 - 63 |
| V, Cen or EW | Adj. | 00 - 63 |
| V, Position | 42 | 00 - 63 |
| H, Centre | Adj. | 00 - 63 |
| Blue HWB | Adj. | 00 - 63 |
| Green HWB | Adj. | 00 - 63 |
| Red HWB | Adj. | 00 - 63 |

4. Press the Blue (Next) or Green (previous) buttons to select the adjustment item from the table.
5. Press the Yellow (+) or Red (-) buttons to change the data as required.
6. Turn off the power to quit the service mode when adjustments are completed.

4-2. TEST MODE 2:

TT -- Mode is available by pressing the Test button twice, O.S.D 'TT --' appears. The functions described below are available by pressing two digits. To release the 'TT --' mode, press 0 twice, press 'TEST' , press 'TV' or switch the TV into Stand-by mode.

| | |
|----|--|
| 00 | Switch 'TT--' Mode off. |
| 01 | Set picture level to maximum. |
| 02 | Set picture level to minimum. |
| 03 | Set volume to 35%. |
| 04 | Set volume to 50%. |
| 05 | Set volume to 65%. |
| 06 | Set volume to 80%. |
| 07 | Ageing condition (picture max., brightness max.). |
| 08 | Shipping condition (Analog values are RESET to factory setting, Prog 1 is selected, TT--mode switched off, Vol = 35%). |
| 09 | Dummy. |
| 10 | No function. |
| 11 | Dummy |
| 12 | Text Picture Level Offset (Enable/Disable) |
| 13 | Select Odd / Even field for Non-interlaced teletext. |
| 14 | Select Interlaced / Non-interlaced teletext display. |
| 15 | Read factory setting from ROM to NVM - Reads Volume, Brightness, Picture, Hue, Sharpness and Colour values from ROM to the actual used values (Last Power Memory). |
| 16 | No function |
| 17 | Enable / Disable Sharpness Operation. |
| 18 | Enable / Disable Teletext Operation. |
| 19 | Enable / Disable NTSC Operation. |
| 20 | No function. |
| 21 | Sub Picture. |
| 22 | Sub Colour (Pal / Secam Different Stores) |
| 23 | Sub Brightness. |
| 24 | Destination System BG/L. |

| | |
|-------|----------------------------------|
| 25 | Destination Systems BG/L. |
| 26 | Destination Systems I. |
| 27 | Destination System I/I'. |
| 28 | Destination BG only. |
| 29 | Dummy. |
| 30 | No function. |
| 31-32 | Dummy. |
| 33 | Auto AGC Adjust. |
| 34 | Auto PLL Adjust. |
| 35-37 | Dummy. |
| 38 | Enter G2 adjustment mode. |
| 39 | Dummy. |
| 40 | No function. |
| 41 | Re-initialise NVM. |
| 42 | Dummy. |
| 43 | Re-initialise Geometry settings. |
| 44-47 | Dummy |
| 48 | Set NVM testbyte to 44h in NVM. |
| 49 | Erase NVM testbyte |
| 50 | No function. |

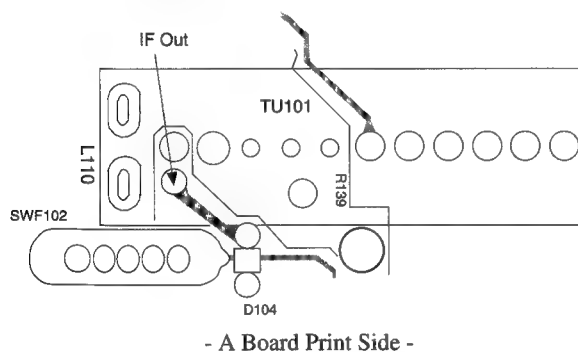
Note : For Test Modes 41 - 50, it is necessary to ensure that the TV is set to Prog 59.

IF ADJUSTMENT (AUTOMATIC)

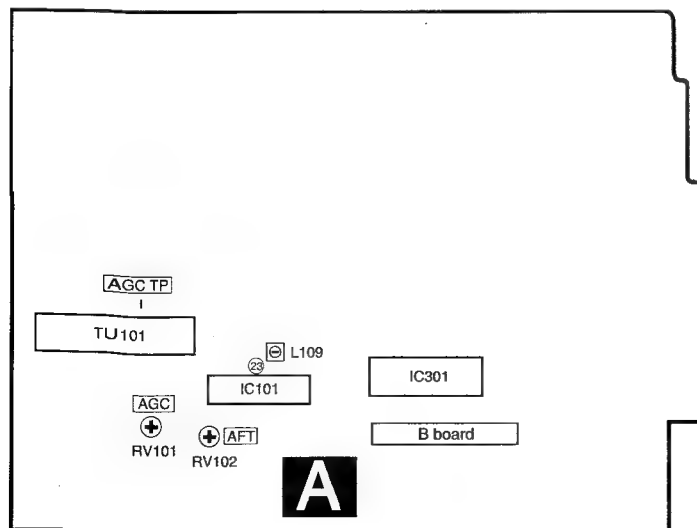
1. Input a 38.9 MHz 100dBμ CW signal at the IF Out injection point.
2. Enter into service mode and press 34.
3. Connect a digital voltmeter to IC101 pin (23).
4. Check AFT 2.5V \pm 0.3V dc.
5. Press '00' on the Remote Commander.

**SYSTEM L ADJUSTMENT
(Italian, French, AEP, Spanish Models)**

1. Input a 33.9MHz 100dBμ CW signal at the IF Out injection point.
2. From the On Screen Menu set System to L band 1.
3. Connect a digital voltmeter to IC101 pin (23).
4. Adjust RV102 AFT for 2.5V \pm 0.3V dc.

**AGC ADJUSTMENT**

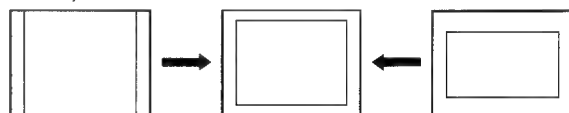
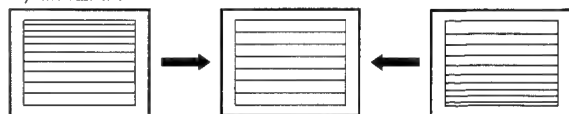
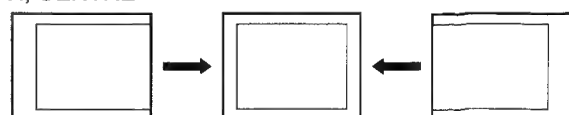
1. Receive an off-air signal.
2. Enter into the Service adjust menu and select AGC.
3. Adjust the data using the Red and Yellow buttons on the Remote Commander so that there is no snow or cross - modulation visible on the screen.
4. Change the receiving off-air channel, and confirm the above status.

**DEFLECTION SYSTEM ADJUSTMENT**

1. Enter into the service mode.
2. Using the Blue or Green buttons select the Adjust item.
3. Press the Yellow button to enter the adjustment submenu.
4. Select and adjust each item in order to obtain the optimum image.

See Note on page 23

| Adjustment | Set | Range |
|-------------|------|---------|
| VERT, AMPL | Adj. | 00 - 63 |
| VER, BREATH | 00 | 00 - 63 |
| PAR, AMPL | 00 | 00 - 63 |
| PAR, TILT | 32 | 00 - 63 |
| V, LINEAR | Adj. | 00 - 63 |
| CORN, CORR | Adj. | 00 - 63 |
| V, CENTRE | Adj. | 00 - 63 |
| V, POSITION | 42 | 00 - 63 |
| H, CENTRE | Adj. | 00 - 63 |

VERT, AMPL**V, LINEAR****V, CENTRE****H, CENTRE**

Fit the link as required to obtain the correct horizontal picture size.

4-3. BE-4A SELF DIAGNOSTIC SOFTWARE

The identification of errors within the BE-4A chassis is triggered in 1 of 2 ways :- 1: Bus busy or 2: Device failure to respond to I²C. In the event of one of these situations arising the software will first try to release the Bus if busy (Failure to do so will report with a continuous flashing LED) and then communicate with each relevant device in turn to establish if a device is faulty. If a device is found to be faulty the relevant device number will be displayed through the LED by a Series of flashes which must be counted (See Table 1), Non fatal errors are reported with this method.

If a fatal error is found, the set will simply stay in whichever state it was when the error occurred, but if a non fatal error occurs the set will try to continue to operate.

Table 1

| No of Flashes | Meaning |
|---------------|--|
| 2 | IC301 not acknowledging I ² C transmission, NVM OK. |
| 3 | IC301 FAULT (Not OK) - flags |
| 4 | IC301 - No H Flyback |
| 5 | IC301 - Stack Overflow. |
| 6 | Overvoltage / Overcurrent Protection (Pin 52) high. |
| 7 | IC002 not acknowledging I ² C transmission, IC301 OK. |
| 8 | IC002 and IC301 - No I ² C acknowledgment. |
| 9 | General I ² C Error (SDA or SCL being held low) (IC301, IC001, IC002, CN001) |

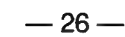
Flash Timing Example : e.g. error number 3

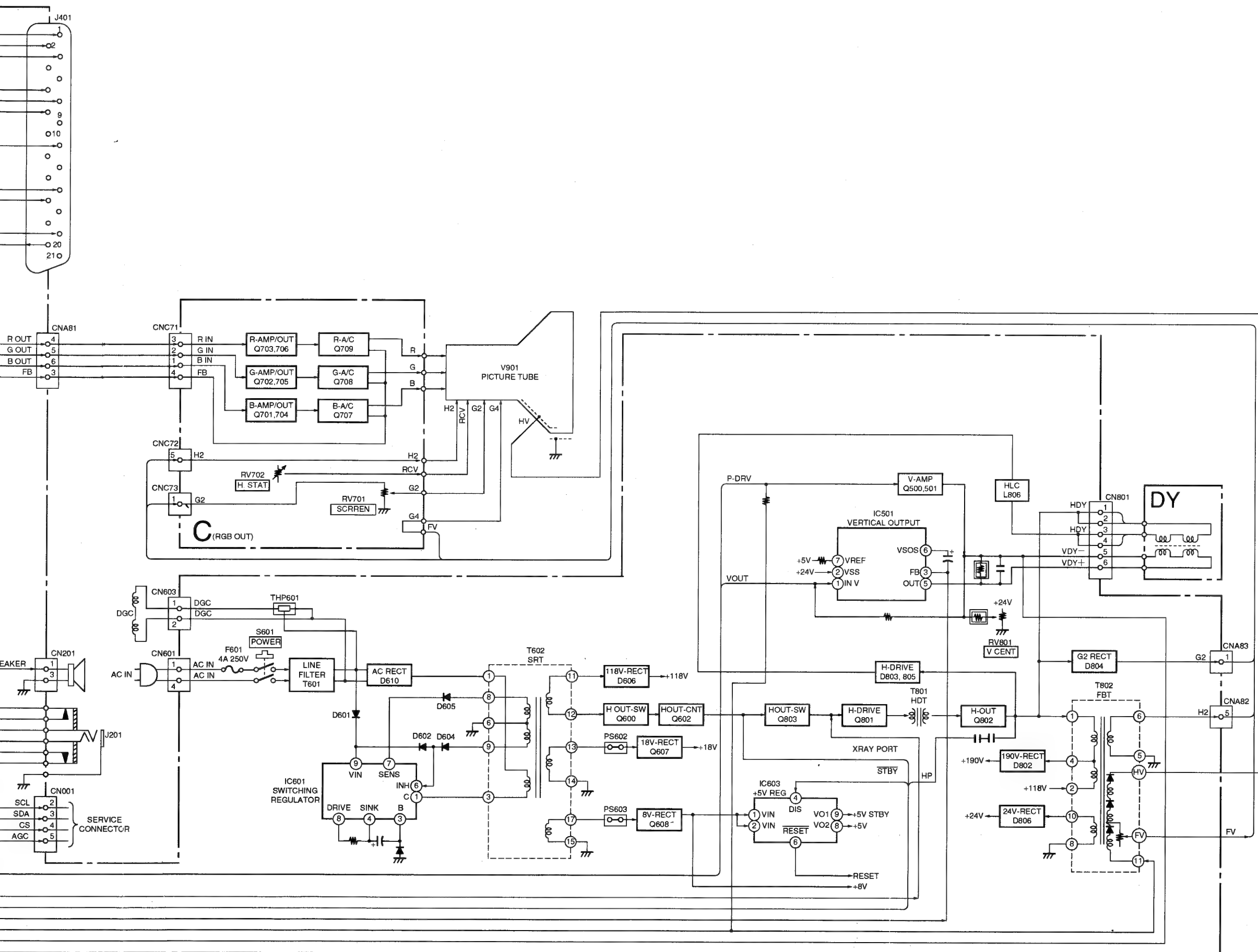
Stby LED



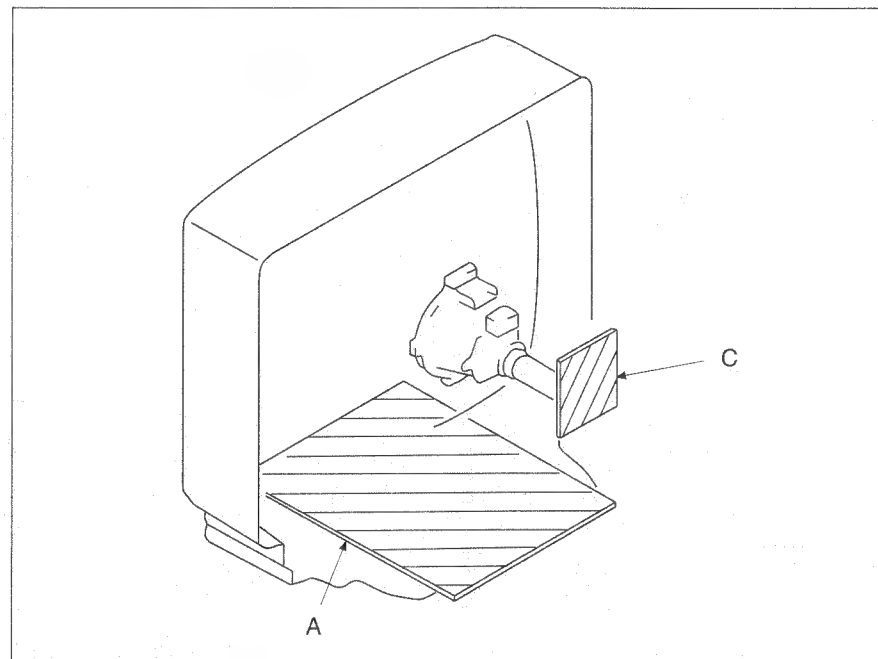
Note : Deflection System Adjustments should not be carried out whilst using an NTSC (60Hz) signal, or if the signal is unlocked.

5-1. BLOCK DIAGRAM





5-2. CIRCUIT BOARDS LOCATION



5-3. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

Note :

- All capacitors are in μF unless otherwise noted. pF: μF 50WV or less are not indicated except for electrolytic and tantalums.
- All resistors are in ohms.
k = 1000, M = 1000K
- Indication of resistance, which does not have one for rating electrical power, is as follows.

Pitch : 5 mm
Rating electrical power $\frac{1}{4}$ W

- : nonflammable resistor.
- : internal component.
- : panel designation, or adjustment for repair.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- : earth - ground.
- : earth - chassis.
- : no mounted.

Note : The components identified by shading and marked are critical for safety. Replace only with the part number specified.

Note : Les composants identifiés par une trame et une marque sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Reference information

| | | |
|-----------|---------|--------------------------|
| RESISTOR | : RN | METAL FILM |
| | : RC | SOLID |
| | : FPRD | NONFLAMMABLE CARBON |
| | : FUSE | NONFLAMMABLE FUSIBLE |
| | : RS | NONFLAMMABLE METAL OXIDE |
| | : RB | NONFLAMMABLE CEMENT |
| | : RW | NONFLAMMABLE WIREWOUND |
| | | ADJUSTABLE RESISTOR |
| COIL | : LF-8L | MICRO INDUCTOR |
| CAPACITOR | : TA | TANTALUM |
| | : PS | STYROL |
| | : PP | POLYPROPYLENE |
| | : PT | MYLAR |
| | : MPS | METALIZED POLYESTER |
| | : MPP | METALIZED POLYPROPYLENE |
| | : ALB | BIPOLAR |
| | : ALT | HIGH TEMPERATURE |
| | : ALR | HIGH RIPPLE |

- Readings are taken with a colour-bar signal input.
- Readings are taken with 10M digital multimeter.
- Voltages are dc with respect to ground unless otherwise noted.
- Voltage variations may be noted due to normal production tolerances.
- All voltages are in V.
- Circled numbers are waveform references.
- : B+ bus.
- : signal path. (RF)

— A BOARD —

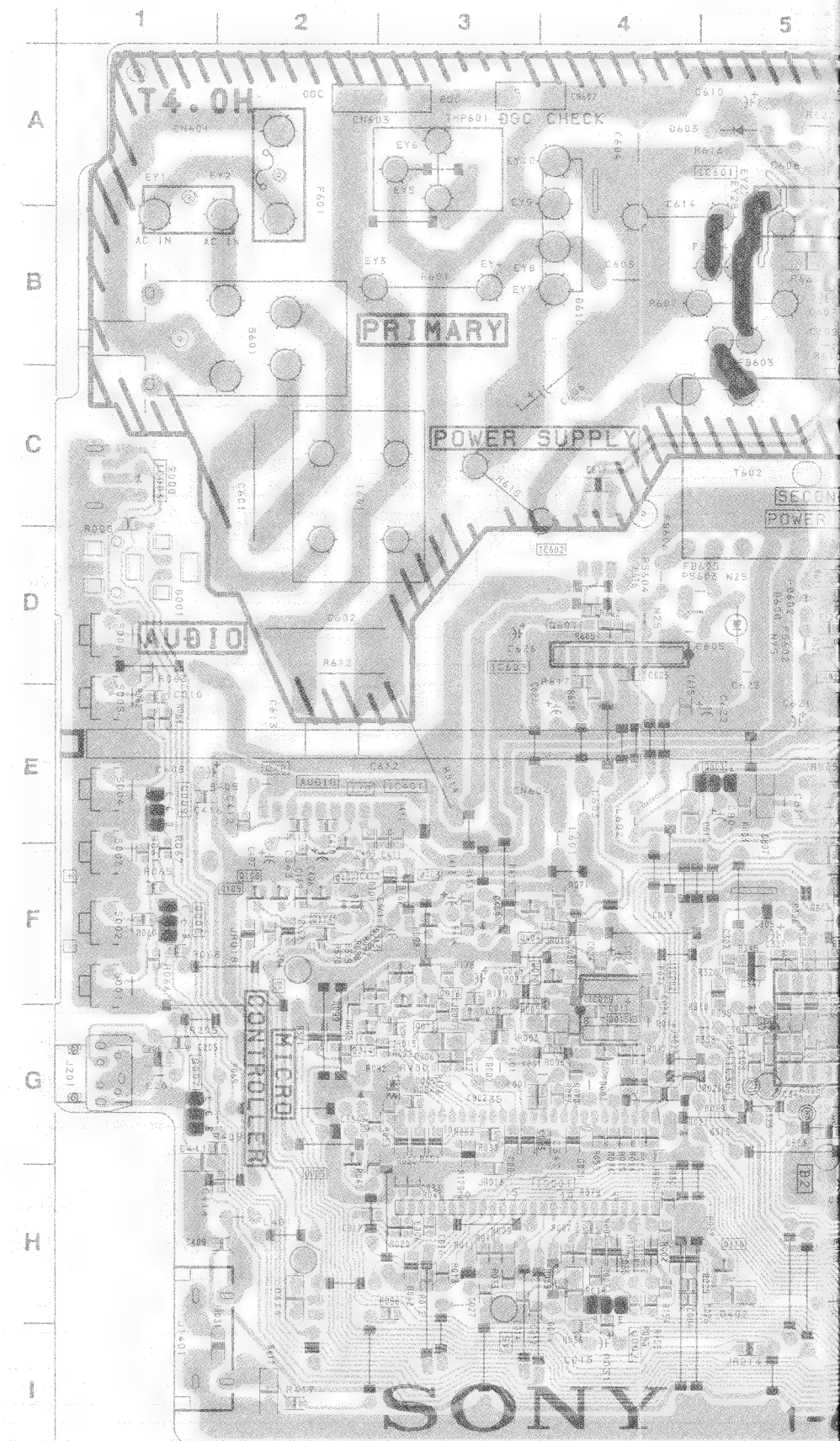
| IC | | Q114 | F-2 | D305 | G-2 |
|------------|------|-------|------|----------|------|
| IC001 | H-4 | Q115 | F-10 | D307 | G-11 |
| IC002 | G-4 | Q116 | F-9 | D308 | F-8 |
| IC003 | C-1 | Q300 | F-7 | D401 | H-12 |
| IC101 | G-10 | Q301 | F-6 | D402 | H-5 |
| IC301 | G-5 | Q302 | F-7 | D403 | H-12 |
| IC302 | H-7 | Q303 | G-7 | D404 | H-12 |
| IC401 | E-3 | Q304 | F-7 | D405 | H-12 |
| IC501 | D-9 | Q305 | G-7 | D406 | H-11 |
| IC601 | A-5 | Q306 | G-8 | D407 | G-12 |
| IC603 | D-3 | Q307 | F-8 | D408 | I-12 |
| | | Q401 | H-10 | D409 | F-3 |
| TRANSISTOR | | Q402 | F-2 | D410 | I-11 |
| Q001 | H-8 | Q403 | F-3 | D414 | H-2 |
| Q002 | I-4 | Q404 | F-4 | D501 | E-8 |
| Q005 | H-2 | Q600 | D-6 | D600 | D-6 |
| Q006 | H-9 | Q602 | D-6 | D601 | A-6 |
| Q007 | G-1 | Q801 | E-6 | D602 | B-6 |
| Q008 | F-1 | Q802 | C-9 | D603 | A-5 |
| Q009 | E-1 | Q803 | E-5 | D604 | B-6 |
| Q010 | F-4 | Q804 | C-7 | D605 | B-6 |
| Q011 | H-8 | Q805 | B-7 | D606 | D-6 |
| Q012 | G-3 | | | D607 | E-6 |
| Q013 | F-3 | DIODE | | D608 | D-5 |
| Q014 | G-2 | D001 | D-1 | D610 | B-4 |
| Q015 | G-4 | D002 | F-8 | D611 | D-6 |
| Q016 | F-3 | D004 | F-5 | D612 | E-5 |
| Q100 | F-2 | D005 | G-4 | D801 | E-7 |
| Q101 | G-11 | D006 | G-3 | D802 | A-8 |
| Q102 | G-11 | D014 | I-4 | D803 | C-11 |
| Q103 | G-11 | D100 | F-3 | D804 | B-10 |
| Q105 | F-2 | D102 | G-11 | D805 | C-10 |
| Q107 | H-9 | D104 | G-11 | D806 | A-11 |
| Q109 | G-10 | D105 | F-8 | D807 | E-5 |
| Q110 | H-5 | D106 | F-8 | | |
| Q111 | G-8 | D107 | F-2 | VARIABLE | |
| Q112 | G-12 | D109 | F-9 | RESISTOR | |
| Q113 | G-9 | D301 | F-6 | RV102 | H-10 |
| | | D302 | F-7 | RV801 | E-9 |

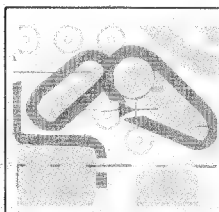
- Mark : KV-M2170A, M2171A, M2170B, M2171B, M2170D, M2171D, M2170E, 2171E ONLY
- Mark : KV-M2170K, M2171K, M2171KR ONLY

A

SYSTEM CONTROL, HORIZONTAL OUTPUT,
VERTICAL OUTPUT, CHROMINANCE,
POWER, AUDIO

— A BOARD —



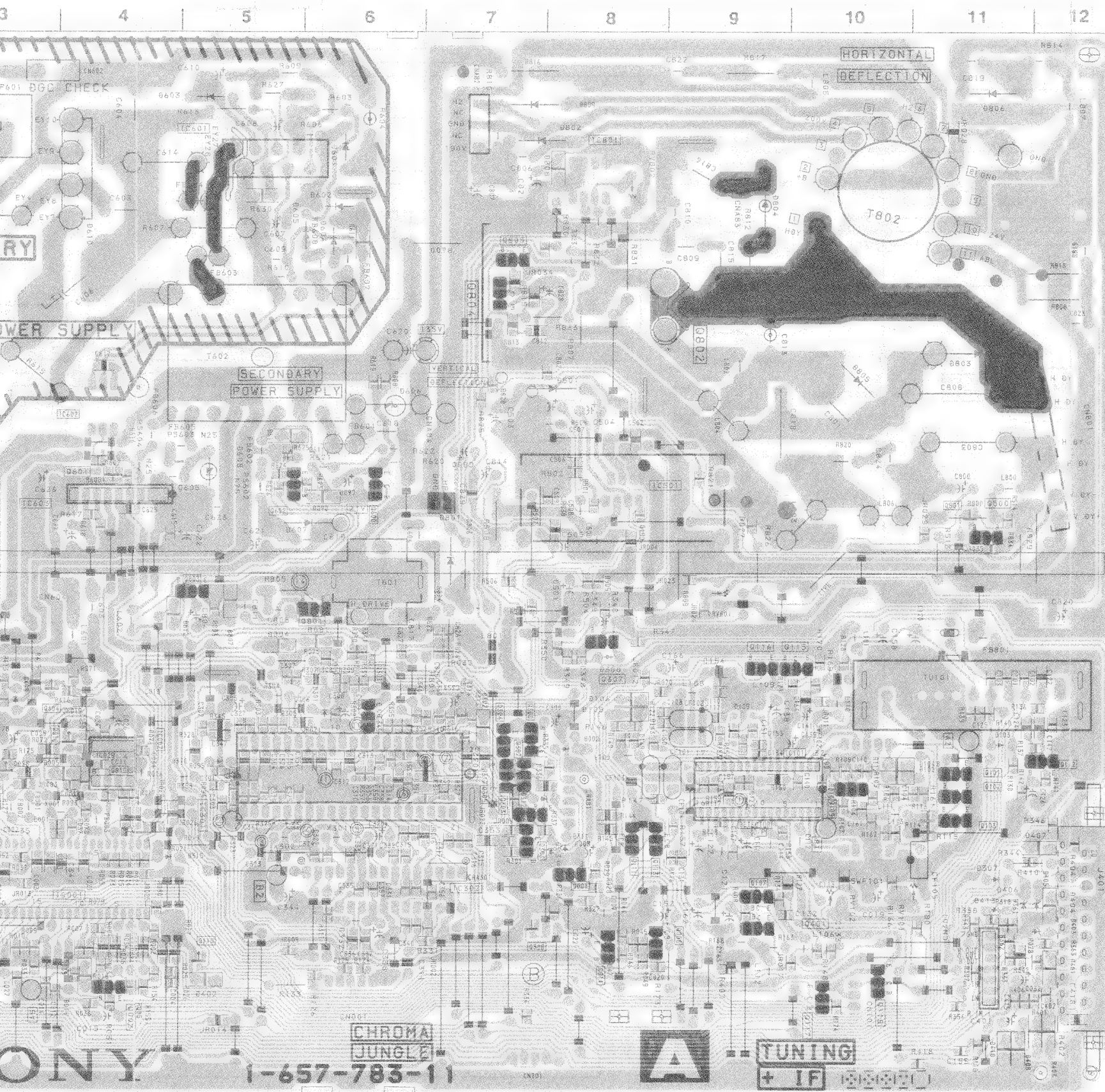


NOTE:

The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.

KV-M217

KV-M217

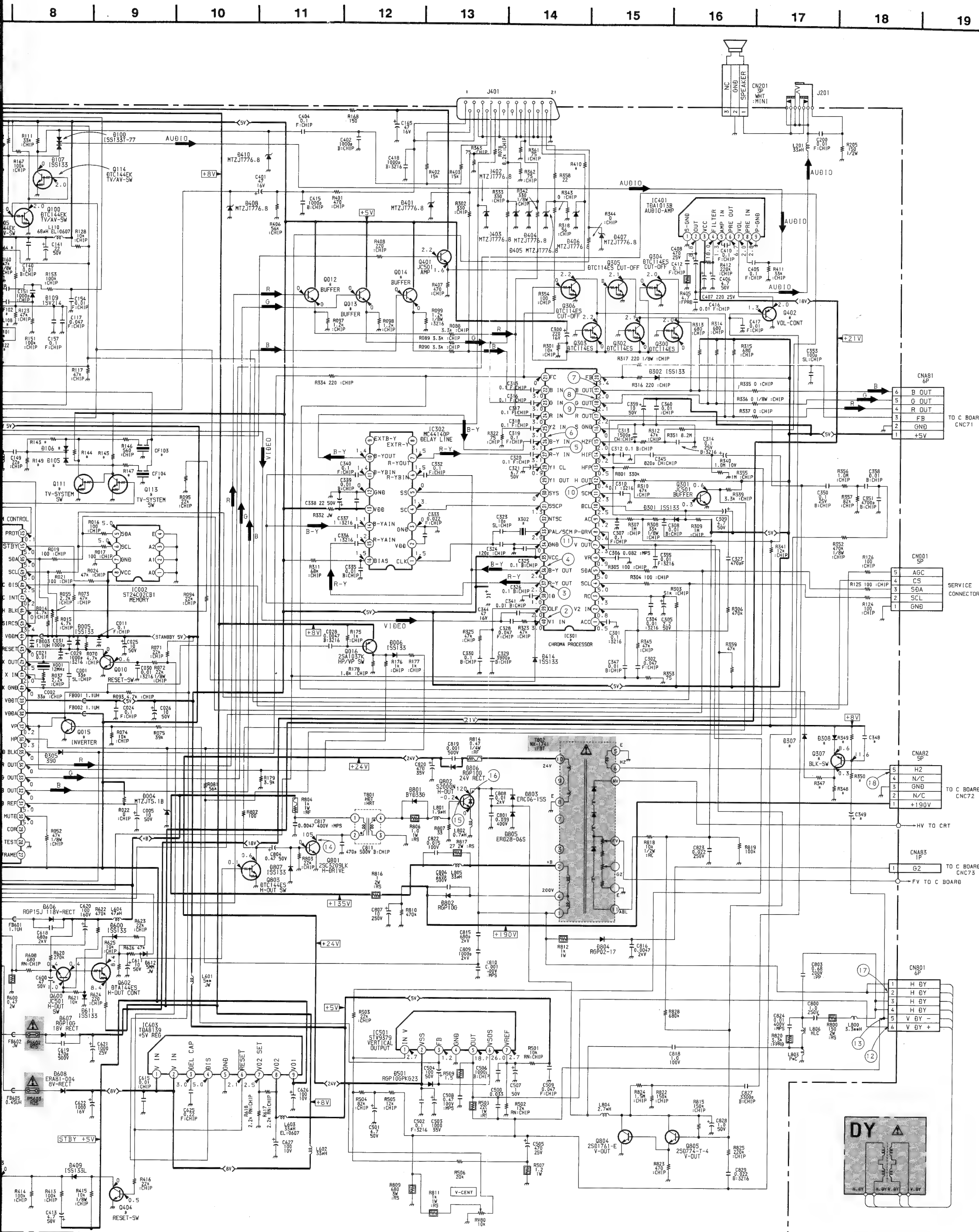


A BOARD * MARK

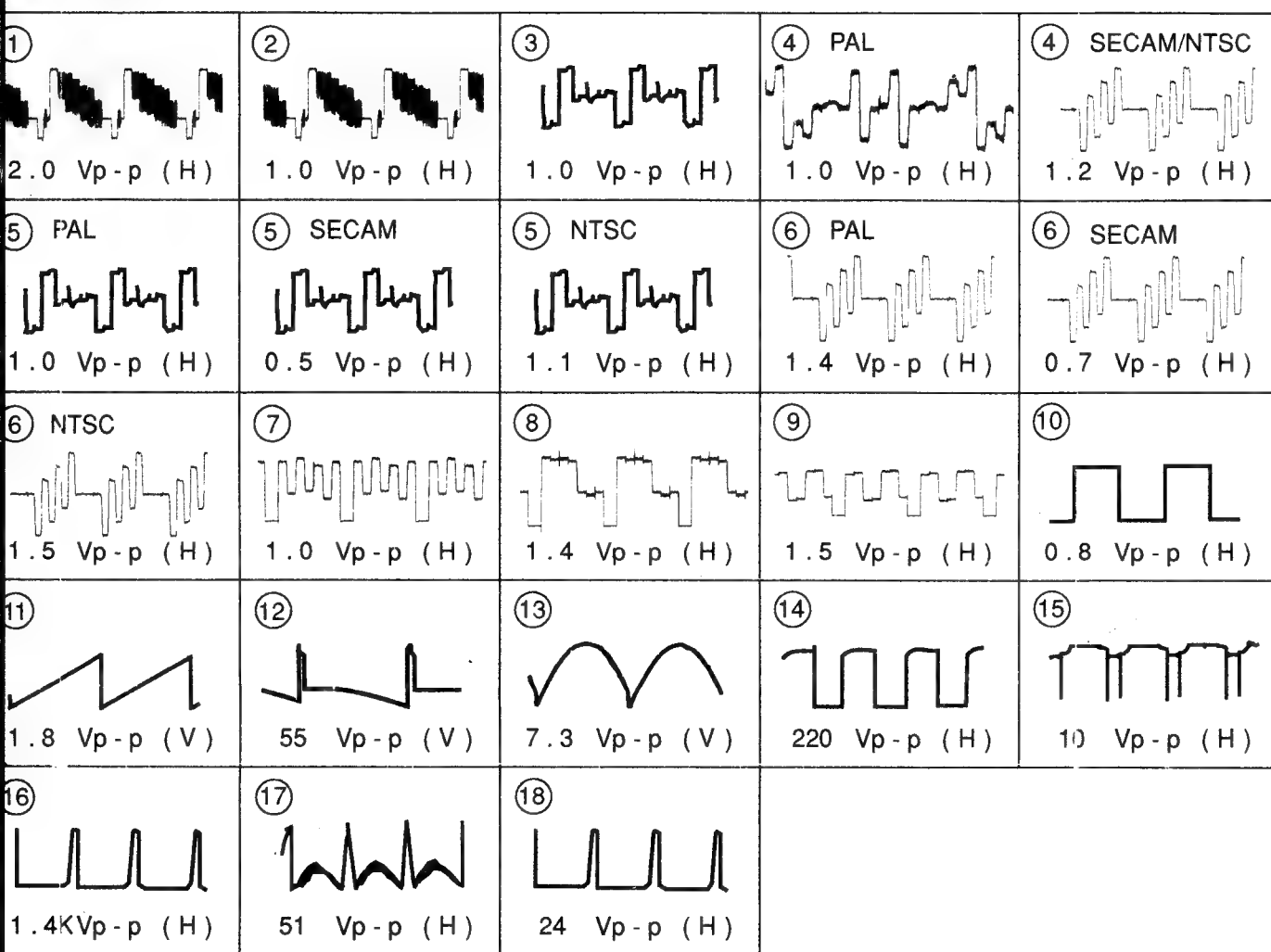
| Model | M2170A M2171A | M2170B M2171B | M2170D M2171D | M2170E M2171E | M2170K M2171K | M2171KR | M2170L M2171L | M2170U M2171U |
|----------|------------------------------------|------------------|------------------|------------------|------------------|-------------|------------------|------------------|
| Ref. No. | | | | | | | | |
| C112 | 0.1 | 0.1 | 0.1 | 0.1 | — | — | — | — |
| C116 | 2.2 50V | 2.2 50V | 2.2 50V | 2.2 50V | — | — | — | — |
| C131 | — | — | — | — | 0.001 | 0.001 | — | — |
| C164 | 1 | 1 | 1 | 1 | — | — | — | — |
| C348 | 0.01 | 0.01 | 0.01 | 0.01 | — | — | — | — |
| C349 | 22 50V | 22 50V | 22 50V | 22 50V | — | — | — | — |
| CF101 | 5.5/5.74MHz | 5.5/6.5MHz | 5.5/5.74MHz | 5.5/5.74MHz | 5.5/5.74MHz | 5.5/5.74MHz | 6.0/6.5MHz | 6.0/6.5MHz |
| CF102 | — | — | — | — | 6.5MHz | 6.5MHz | — | — |
| CF103 | 5.5MHz | 5.5MHz | 5.5MHz | 5.5MHz | 5.5MHz | 5.5MHz | 6.0MHz | 6.0MHz |
| CF104 | — | — | — | — | 6.5MHz | 6.5MHz | — | — |
| CF105 | 5.5MHz | 5.5MHz | 5.5MHz | 5.5MHz | — | — | — | — |
| D105 | — | — | — | — | 1SS133 | 1SS133 | — | — |
| D106 | — | — | — | — | 1SS133 | 1SS133 | — | — |
| D307 | 1SS133 | 1SS133 | 1SS133 | 1SS133 | — | — | — | — |
| D308 | 1SS133 | 1SS133 | 1SS133 | 1SS133 | — | — | — | — |
| FB801 | — | — | — | — | 1.1μH | 1.1μH | 1.1μH | 1.1μH |
| IC001 | Refer to "A board" * mark-2" table | | | | | | | |
| IC101 | TDA9806 | TDA9812 | TDA9806 | TDA9806 | TDA9806 | TDA9806 | TDA9806 | TDA9806 |
| IC301 | MC44007P | MC44002P | MC44002P | MC44007P | MC44002P | MC44002P | MC44007P | MC44007P |
| L108 | 8.2μH | 8.2μH | 8.2μH | 8.2μH | 4.7μH | 4.7μH | 8.2μH | 8.2μH |
| L113 | 0.22μH | 0.22μH | 0.22μH | 0.22μH | 0.22μH | 0.22μH | 0.22μH | 0 CHIP |
| Q001 | JC501 | JC501 | JC501 | JC501 | 2SC2410S | 2SC2410S | 2SC2410S | 2SC2410S |
| Q002 | JA101 | JA101 | JA101 | JA101 | 2SC933AS | 2SC933AS | 2SC933AS | 2SC933AS |
| Q005 | JC501 | JC501 | JC501 | JC501 | 2SC2412K | 2SC2412K | 2SC2412K | 2SC2412K |
| Q006 | JA101 | JA101 | JA101 | JA101 | 2SC933AS | 2SC933AS | 2SC933AS | 2SC933AS |
| Q010 | JC501 | JC501 | JC501 | JC501 | 2SC2412K | 2SC2412K | 2SC2412K | 2SC2412K |
| Q012 | JC501 | JC501 | JC501 | JC501 | 2SC2412K | 2SC2412K | 2SC2412K | 2SC2412K |
| Q013 | JC501 | JC501 | JC501 | JC501 | 2SC2412K | 2SC2412K | 2SC2412K | 2SC2412K |
| Q014 | JC501 | JC501 | JC501 | JC501 | 2SC2412K | 2SC2412K | 2SC2412K | 2SC2412K |
| Q015 | JC501 | JC501 | JC501 | JC501 | 2SC2412K | 2SC2412K | 2SC2412K | 2SC2412K |
| Q111 | — | — | — | — | DTC144ES | DTC144ES | — | — |
| Q113 | — | — | — | — | DTC144ES | DTC144ES | — | — |
| Q307 | 2SA933AS | 2SA933AS | 2SA933AS | 2SA933AS | — | — | — | — |
| Q402 | JA101 | JA101 | JA101 | JA101 | 2SC933AS | 2SC933AS | 2SC933AS | 2SC933AS |
| Q403 | JC501 | JC501 | JC501 | JC501 | 2SC2412K | 2SC2412K | 2SC2412K | 2SC2412K |
| Q404 | JC501 | JC501 | JC501 | JC501 | 2SC2412K | 2SC2412K | 2SC2412K | 2SC2412K |
| R122 | 150 | 150 | 150 | 150 | 100 | 100 | 150 | 150 |
| R134 | 180 | 180 | 180 | 180 | 180 | 180 | 150 | 150 |
| R143 | 0 | 0 | 0 | 0 | — | — | 0 | 0 |
| R144 | — | — | — | — | 2.2K | 2.2K | — | — |
| R145 | — | — | — | — | 2.2K | 2.2K | — | — |
| R147 | — | — | — | — | 560 | 560 | — | — |
| R149 | — | — | — | — | 2.2K | 2.2K | — | — |
| R157 | 1K | 1K | 1K | 1K | — | — | — | — |
| R158 | 180 | 180 | 180 | 180 | 390 | 390 | 390 | 390 |
| R161 | 0 | — | 0 | 0 | 0 | 0 | 0 | 0 |
| R180 | 1K | 1K | 1K | 1K | — | — | — | — |
| R347 | 470 | 470 | 470 | 470 | — | — | — | — |
| R348 | 10K | 10K | 10K | 10K | — | — | — | — |
| R349 | 220K | 220K | 220K | 220K | — | — | — | — |
| R350 | 220 | 220 | 220 | 220 | — | — | — | — |
| R355 | 39μF 10V | 39μF 10V | 39μF 10V | 39μF 10V | 47K | 47K | 47K | 47K |
| R358 | 47K | 47K | 47K | 47K | 39μF 10V | 39μF 10V | 39μF 10V | 39μF 10V |
| R410 | 75 | 75 | 75 | 75 | 75 | 75 | 68 | 68 |
| RV102 | 22K | 22K | 22K | 22K | — | — | — | — |
| SWF101 | OPWG1963 | OFWK3953 | OPWG1963 | OPWG1963 | OFWK2950 | OFWK2950 | OFWJ1952M | OFWJ1952M |
| TU101 | TELE1X001A | BT-AC401 | BT-AC401 | BT-AC401 | BT-AC401 | BT-AC401 | BT-AC401 | BT-AC401 |
| X302 | — | — | — | — | 17.472MHz | 17.472MHz | 17.472MHz | 17.472MHz |

A BOARD * MARK-2 (IC001)

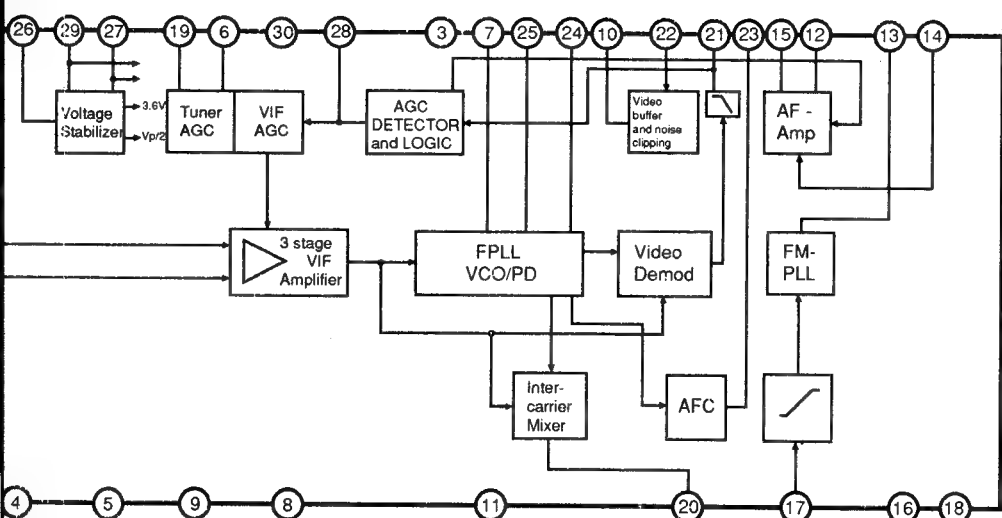
| | |
|---|---------------|
| KV-M2170A/M2170B/M2170D/M2170E/M2170K/M2170L/M2170U | SAA5288ZP/007 |
| KV-M2171A/M2171B/M2171D/M2171E/M2171K/M2171L/M2171U | SAA5290ZP/007 |
| KV-M2171KR | SAA5290ZP/006 |



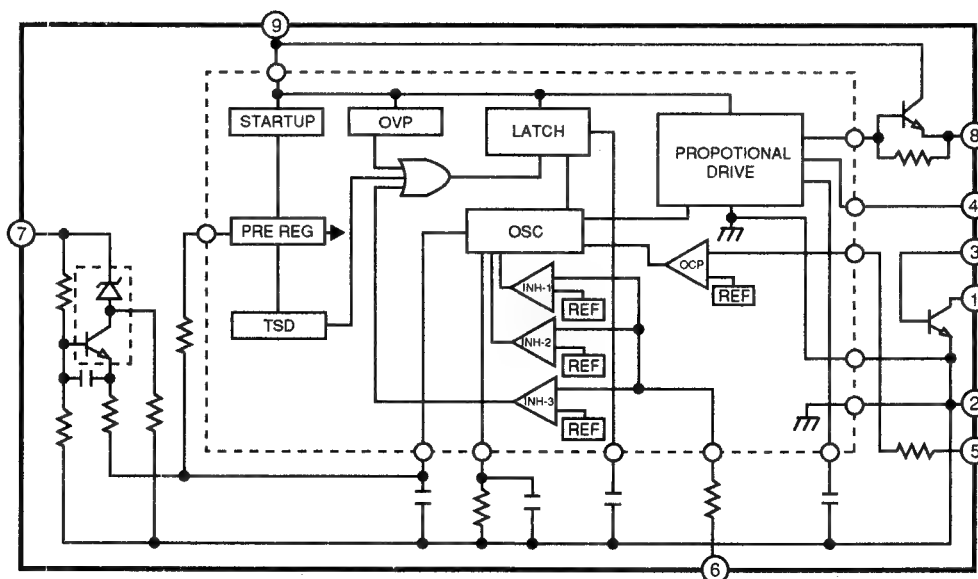
WAVEFORMS A BOARD



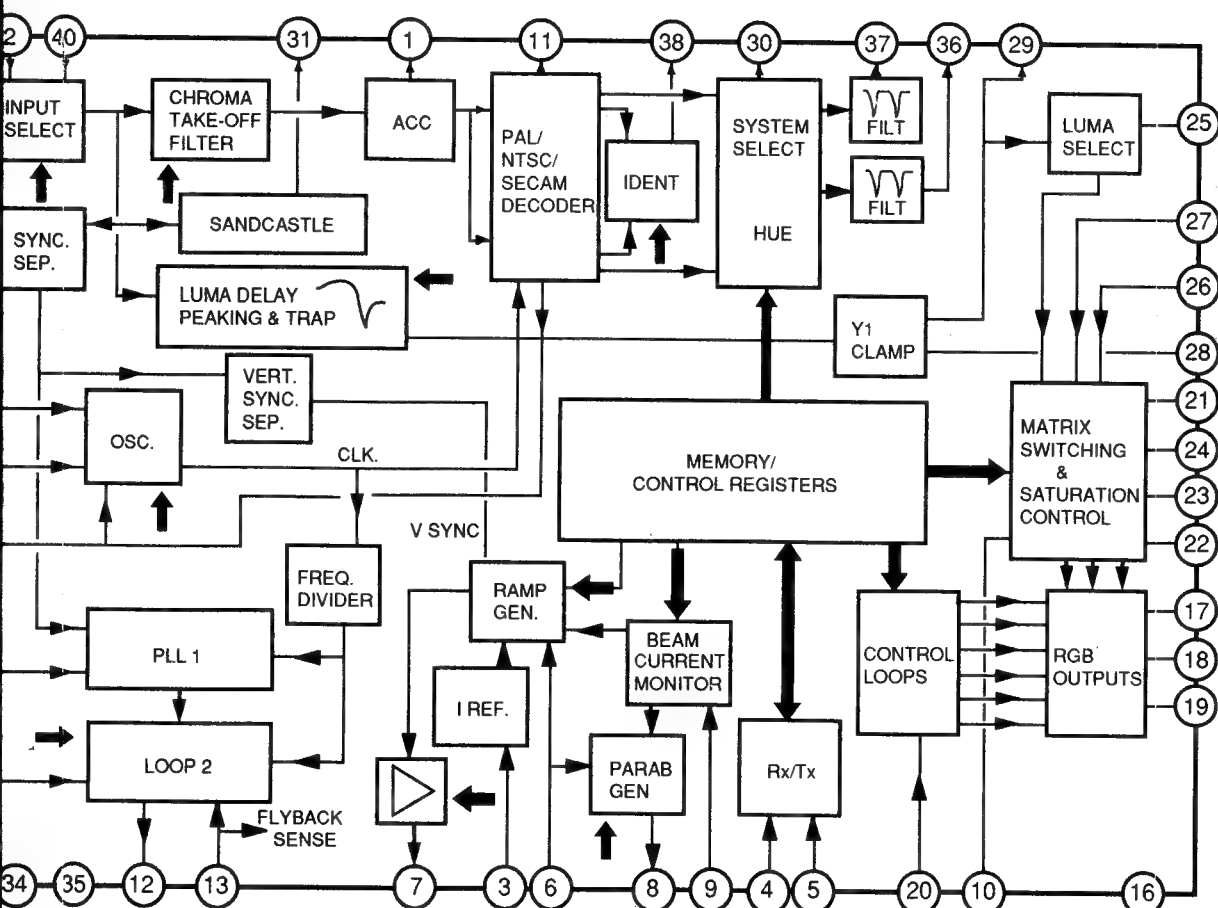
BOARD IC101 TDA9806/TDA9812



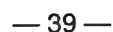
A BOARD IC601 STRS5706



BOARD IC301 MC44002P/MC44007P



— C BOARD —



3

4

5

6

7

8

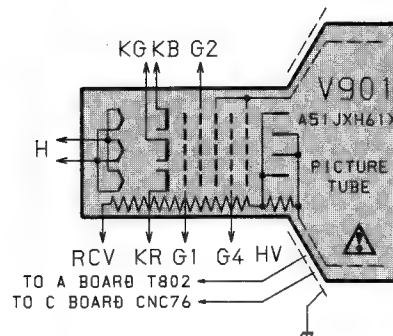
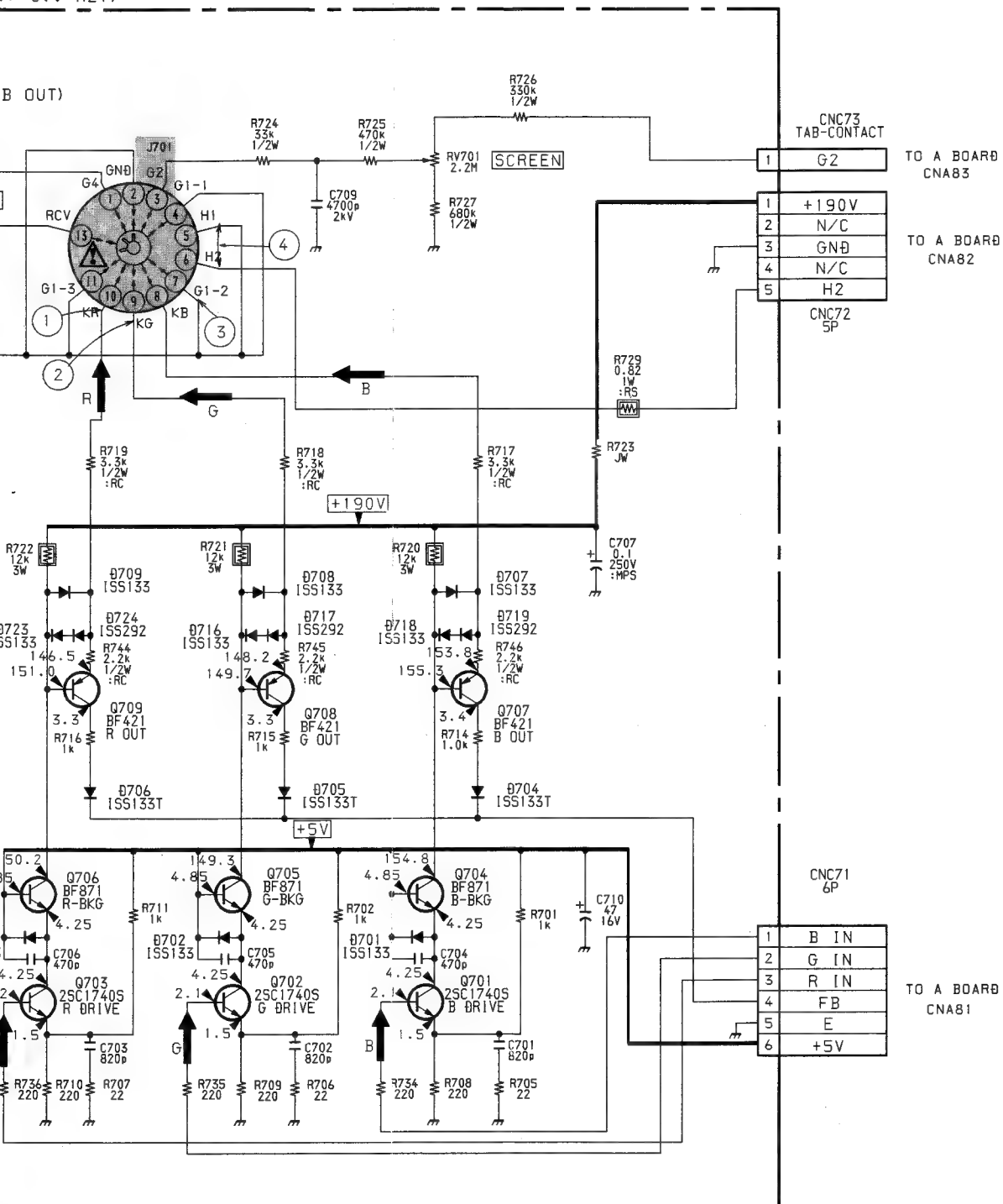
9

10

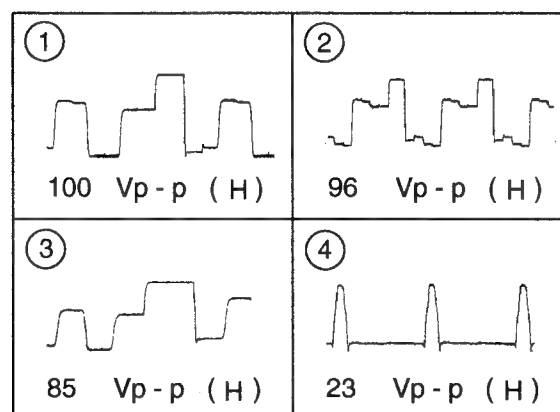
11

>-C.-M217

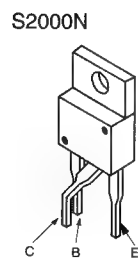
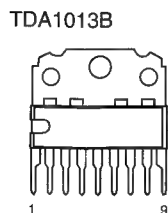
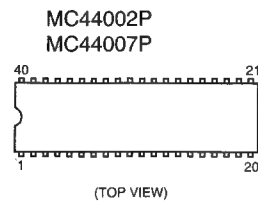
B OUT)



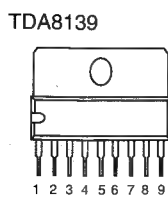
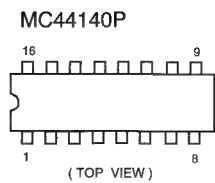
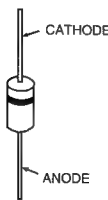
WAVEFORMS C BOARD



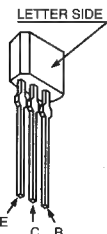
5-4. SEMICONDUCTORS



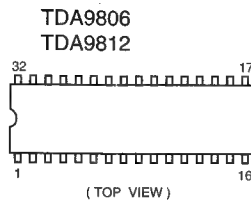
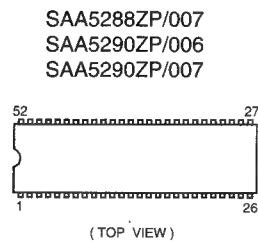
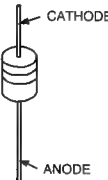
BYD33G ERD28-08S
EG-1Z-V1 EU-1Z
EGP20G RGP02-17EL-6433
EL1Z RGP02-17PKG23
EM1-V1 RGP10-GPKG23
ERC06-15S 1SS168
ERD28-06S 1SS238



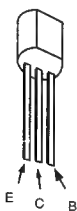
2SA933AS
2SA933S
2SA1175-HFE



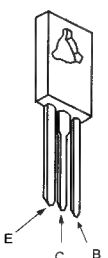
ERA81-004 RD5.1ESB2
ERA83-006 RD6.8ESB2
MTZJ-5.1B 1SS133
MTZJ-6.8A



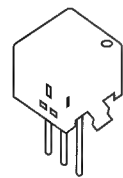
BF421
2SA1091-O



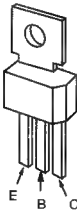
2SC2688-LK



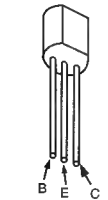
SBX1790-11
SBX1790-51



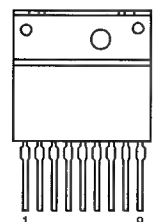
BF871



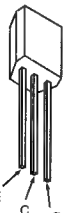
2SC3779C



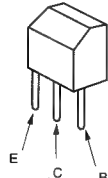
STR-S5706



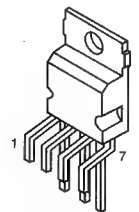
DTA144ES
DTC114ES
DTC144EK
DTC144ES



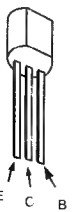
2SD774



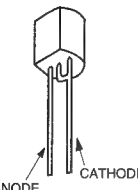
STV9379



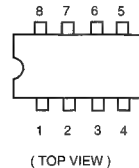
JA101-Q 2SA733-K
JC501-Q 2SC1740S
2SA1037K 2SC2785-HFE



HZT33-02RE
UPC574J



ST24C02CB1



SECTION 6
EXPLODED VIEWS

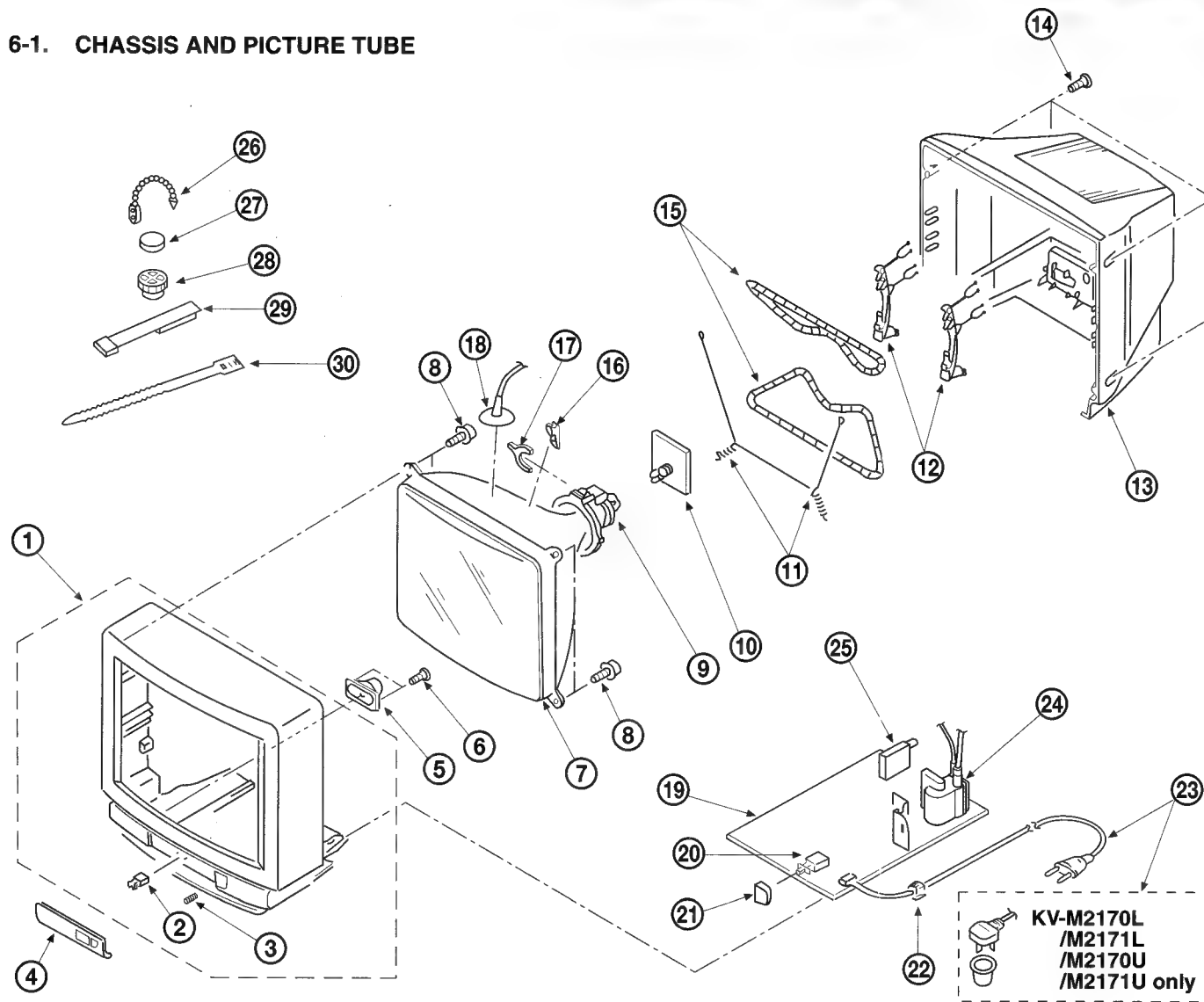
NOTE :

- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remarks column.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.


The components identified by shading and marked ! are critical for safety. Replace only with the part number specified.

Les composants identifiés par une trame et une marque ! sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.


6-1. CHASSIS AND PICTURE TUBE












| REF NO | PART NO | DESCRIPTION | REMARK | REF NO | PART NO | DESCRIPTION | REMARK |
|--------|--------------|--|--------|--------|----------------|--|--------|
| 1 | X-4200-229-2 | BEZNET ASSY (KV-M2170A/M2171A/M2170B/M2171B/M2170D/M2171D/M2170E/M2171E) | | 6 | 4-039-356-01 | SCREW (3x12), (+) BV TAPPING | |
| | X-4200-229-1 | BEZNET ASSY (KV-M2170K/M2171K/M2171KR/M2170L/M2171L/M2170U/M2171U) | | 7 | ! 8-738-784-05 | PICTURE TUBE (SD-169) (A51JXH61X) | |
| 2 | 4-392-036-01 | CATCHER, PUSH | | 8 | 4-036-189-01 | SCREW (S), PT | |
| 3 | 4-387-829-11 | SPRING | | 9 | ! 8-451-295-45 | DEFLECTION YOKE (Y21PF2BA) | |
| 4 | 4-203-120-31 | DOOR, CONTROL (KV-M2170A/M2170B/M2170D/M2170E) | | 10 | *A-1638-074-A | C BOARD, COMPLETE (KV-M2170A/M2171A/M2170B/M2171B/M2170D/M2171D/M2170E/M2171E) | |
| | 4-203-120-41 | DOOR, CONTROL (KV-M2171A) | | | *A-1638-068-A | C BOARD, COMPLETE (KV-M2170K/M2171K/M2171KR/M2170L/M2171L/M2170U/M2171U) | |
| | 4-203-120-21 | DOOR, CONTROL (KV-M2171B/M2171D/M2171E) | | 11 | 4-369-318-21 | SPRING, TENSION | |
| | 4-203-120-11 | DOOR, CONTROL (KV-M2170K/M2170L/M2170U) | | | | | |
| | 4-203-120-01 | DOOR, CONTROL (KV-M2171K/M2171KR/M2171L/M2171U) | | | | | |
| 5 | 1-503-258-21 | SPEAKER | | | | | |

The components identified by shading and marked  are critical for safety.

Replace only with the part number specified.

Les composants identifiés par une trame et une marque  sont critiques pour la sécurité.

Ne les remplacer que par une pièce portant le numéro spécifié.

| REF NO | PART NO | DESCRIPTION | REMARK | REF NO | PART NO | DESCRIPTION | REMARK |
|--------|--|---|--------|--------|--------------|--------------------------------|--|
| 12 | *4-386-622-11 | BAND, DGC (KV-M2170A/M2171A/M2170B/M2171B/M2170D/M2171D/M2170E/M2171E) | | 25 | 1-693-303-11 | TUNER (TELE1X001A) | |
| | *4-386-622-01 | BAND, DGC (KV-M2170K/M2171K/M2171KR/M2170L/M2171L/M2170U/M2171U) | | | | (KV-M2170A/M2171A/M2171KR) | |
| 13 | 4-200-732-01 | COVER, REAR (KV-M2170A/M2171A/M2170B/M2171B/M2170D/M2171D/M2170E/M2171E) | | | 1-693-331-00 | TUNER (BT-AC401) | (KV-M2170B/M2171B/M2170D/M2171D/M2170E/M2171E) |
| | 4-200-673-01 | COVER, REAR (KV-M2170K/M2171K/M2171KR/M2170L/M2171L/M2170U/M2171U) | | | 1-693-310-11 | TUNER (TELE4X002A) | (KV-M2170K/M2171K) |
| 14 | 4-039-358-01 | SCREW (4x16), (+) BV TAPPING | | | 1-693-302-11 | TUNER (UV1315) | (KV-M2170L/M2171L) |
| 15 |  1-460-096-21 | COIL, DEGAUSSING (KV-M2170A/M2171A/M2170B/M2171B/M2170D/M2171D/M2170E/M2171E/M2170K/M2171K/M2171KR/M2170L/M2171L/M2170U/M2171U) | | 26 | 8-598-333-00 | TUNER (BT-AU601) | (KV-M2170U/M2171U) |
| |  1-426-145-00 | COIL, DEGAUSSING (KV-M2171A/M2171B/M2170D) | | 27 | 4-308-870-00 | CLIP, LEAD WIRE | |
| 16 | 3-704-495-01 | SPACER, DY | | 28 | 1-452-032-00 | MAGNET, DISK; 10MM Ø | |
| 17 | 1-452-277-00 | MAGNET, BMC | | 29 | 1-452-094-00 | MAGNET, ROTATABLE DISK; 15MM Ø | |
| 18 |  1-440-006-12 | CAP ASSY, HIGH-VOLTAGE (KV-M2170A/M2171A/M2170B/M2171B/M2170D/M2171D/M2170E/M2171E) | | 29 | X-4309-608-0 | PERMALLOY ASSY, CONVERGENCE | |
| |  1-540-007-11 | CAP ASSY, HIGH-VOLTAGE (KV-M2170K/M2171K/M2171KR/M2170L/M2171L/M2170U/M2171U) | | 30 | 3-701-007-00 | BAND, BINDING | |
| 19 | *A-1632-310-A | A BOARD, COMPLETE (KV-M2170A) | | | | | |
| | *A-1632-309-A | A BOARD, COMPLETE (KV-M2171A) | | | | | |
| | *A-1632-314-A | A BOARD, COMPLETE (KV-M2170B) | | | | | |
| | *A-1632-315-A | A BOARD, COMPLETE (KV-M2171B) | | | | | |
| | *A-1632-308-A | A BOARD, COMPLETE (KV-M2170D) | | | | | |
| | *A-1632-307-A | A BOARD, COMPLETE (KV-M2171D) | | | | | |
| | *A-1632-313-A | A BOARD, COMPLETE (KV-M2170E) | | | | | |
| | *A-1632-311-A | A BOARD, COMPLETE (KV-M2171E) | | | | | |
| | *A-1632-306-A | A BOARD, COMPLETE (KV-M2170K) | | | | | |
| | *A-1632-304-A | A BOARD, COMPLETE (KV-M2171K) | | | | | |
| | *A-1632-305-A | A BOARD, COMPLETE (KV-M2171KR) | | | | | |
| | *A-1632-303-A | A BOARD, COMPLETE (KV-M2170L) | | | | | |
| | *A-1632-302-A | A BOARD, COMPLETE (KV-M2171L) | | | | | |
| | *A-1632-301-A | A BOARD, COMPLETE (KV-M2170U) | | | | | |
| | *A-1632-300-A | A BOARD, COMPLETE (KV-M2171U) | | | | | |
| 20 |  1-571-433-21 | SWITCH, PUSH (AC POWER) | | | | | |
| 21 | 4-203-121-01 | BUTTON, POWER (KV-M2170B/M2170K/M2171K/M2171KR/M2170L/M2171L/M2170U/M2171U) | | | | | |
| | 4-203-121-11 | BUTTON, POWER (KV-M2170A/M2171A/M2171B/M2170D/M2171D/M2170E/M2171E) | | | | | |
| 22 | 4-389-201-01 | HOLDER, AC CORD | | | | | |
| 23 |  1-590-270-21 | CORD, POWER (WITH CONNECTOR) 2.5A/250V (KV-M2170A/M2171A/M2170B/M2171B/M2170D/M2171D/M2170E/M2171E) | | | | | |
| |  1-590-460-11 | CORD, POWER (WITH CONNECTOR) 7.0A/250V (KV-M2170K/M2171K/M2171KR) | | | | | |
| |  1-590-762-11 | CORD, POWER (WITH PLUG) 2.5A/250V (KV-M2170L/M2171L/M2170U/M2171U) | | | | | |
| 24 |  1-453-199-11 | TRANSFORMER ASSY, PLYBACK (KY-1741/1721) | | | | | |

SECTION 7

ELECTRICAL PARTS LIST

When indicating parts by reference number, please include the board name.

| | |
|-------------------|------------------------|
| CAPACITORS | COILS |
| MF : mF, PF : mmF | MMH : mH, μ H : mH |

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- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

RESISTORS

- All resistors are in ohms
- F : nonflammable

The components identified by shading and marked **A** are critical for safety.
Replace only with the part number specified.

Les composants identifiés par une trame et une marque  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

| REF.NO. | PART NO. | DESCRIPTION | REMARK | REF.NO. | PART NO. | DESCRIPTION | REMARK |
|---------|---------------|---|--------|---------|--------------|---|----------|
| | *A-1632-310-A | A BOARD, COMPLETE (KV-M2170A) ***** | | C017 | 1-164-005-11 | CERAMIC CHIP 0.47MF | 16V |
| | *A-1632-309-A | A BOARD, COMPLETE (KV-M2171A) ***** | | C019 | 1-124-903-11 | ELECT 1MF | 20% 50V |
| | *A-1632-314-A | A BOARD, COMPLETE (KV-M2170B) ***** | | C020 | 1-164-004-11 | CERAMIC CHIP 0.1MF | 10% 25V |
| | *A-1632-315-A | A BOARD, COMPLETE (KV-M2171B) ***** | | C021 | 1-163-071-91 | CERAMIC CHIP 0.01MF | 50V |
| | *A-1632-315-A | A BOARD, COMPLETE (KV-M2171B) ***** | | C022 | 1-124-903-11 | ELECT 1MF | 20% 50V |
| | *A-1632-308-A | A BOARD, COMPLETE (KV-M2170D) ***** | | C024 | 1-163-038-91 | CERAMIC CHIP 0.1MF | 25V |
| | *A-1632-307-A | A BOARD, COMPLETE (KV-M2171D) ***** | | C025 | 1-126-964-11 | ELECT 10MF | 20% 50V |
| | *A-1632-313-A | A BOARD, COMPLETE (KV-M2170E) ***** | | C026 | 1-126-964-11 | ELECT 10MF | 20% 50V |
| | *A-1632-311-A | A BOARD, COMPLETE (KV-M2171E) ***** | | C027 | 1-163-038-91 | CERAMIC CHIP 100000PF | 25V |
| | *A-1632-306-A | A BOARD, COMPLETE (KV-M2170K) ***** | | C028 | 1-163-055-91 | CERAMIC CHIP 0.0047MF | 10% 50V |
| | *A-1632-304-A | A BOARD, COMPLETE (KV-M2171K) ***** | | C029 | 1-163-009-91 | CERAMIC CHIP 1000PF | 10% 50V |
| | *A-1632-305-A | A BOARD, COMPLETE (KV-M2171KR) ***** | | C030 | 1-163-021-91 | CERAMIC CHIP 10000PF | 10% 100V |
| | *A-1632-303-A | A BOARD, COMPLETE (KV-M2170L) ***** | | C031 | 1-163-009-91 | CERAMIC CHIP 1000PF | 5% 25V |
| | *A-1632-302-A | A BOARD, COMPLETE (KV-M2171L) ***** | | C033 | 1-137-126-91 | FILM 0.01MF | 5% 63V |
| | *A-1632-301-A | A BOARD, COMPLETE (KV-M2170U) ***** | | C101 | 1-164-005-11 | CERAMIC CHIP 0.47MF | 16V |
| | *A-1632-300-A | A BOARD, COMPLETE (KV-M2171U) ***** | | C102 | 1-164-005-11 | CERAMIC CHIP 0.47MF | 16V |
| | | | | C103 | 1-164-005-11 | CERAMIC CHIP 0.47MF | 16V |
| | 4-201-023-01 | SPACER, INSULATING | | C104 | 1-163-021-91 | CERAMIC CHIP 0.01MF | 10% 50V |
| | 4-202-373-01 | SPRING, IC | | | | (KV-M2170A/M2171A/M2170B/M2171B/M2170D M2171D/M2170E/M2171E) | |
| | 4-368-683-21 | SPRING, TRANSISTOR | | C109 | 1-163-038-91 | CERAMIC CHIP 0.1MF | 25V |
| | 4-382-854-11 | SCREW (M3X10), P, SW (+) | | | | (KV-M2170A/M2171A/M2170B/M2171B/M2170D M2171D/M2170E/M2171E) | |
| | 4-812-134-00 | RIVET (DIA. 3.5), NYLON | | C110 | 1-163-021-91 | CERAMIC CHIP 0.01MF | 10% 50V |
| | | | | | | (KV-M2170A/M2171A/M2170B/M2171B/M2170D M2171D/M2170E/M2171E) | |
| | | | | C112 | 1-137-399-11 | FILM 0.1MF | 5% 50V |
| | | | | | | (KV-M2170A/M2171A/M2170B/M2171B/M2170D M2171D/M2170E/M2171E) | |
| | | | | C114 | 1-136-169-00 | FILM 0.22MF | 5% 50V |
| | | | | C116 | 1-124-925-11 | ELECT 2.2MF | 20% 50V |
| | | | | | | (KV-M2170A/M2171A/M2170B/M2171B/M2170D M2171D/M2170E/M2171E) | |
| | | | | C117 | 1-163-035-00 | CERAMIC CHIP 0.047MF | 50V |
| | | | | C120 | 1-126-925-11 | ELECT 470MF | 20% 10V |
| | | | | C121 | 1-136-153-00 | FILM 0.01MF | 5% 50V |
| | | | | C122 | 1-164-665-11 | CERAMIC CHIP 0.039MF | 10% 50V |
| | | | | C123 | 1-163-105-00 | CERAMIC CHIP 33PF | 5% 50V |
| | | | | C124 | 1-164-665-11 | CERAMIC CHIP 0.039MF | 10% 50V |
| | | | | C126 | 1-104-658-91 | ELECT 47MF | 20% 16V |
| | | | | C127 | 1-128-551-11 | ELECT 22MF | 20% 50V |
| | | | | C131 | 1-163-141-00 | CERAMIC CHIP 0.001MF | 10% 50V |
| | | | | | | (KV-M2170K/M2171K/M2171KR) | |
| | | | | C138 | 1-124-925-11 | ELECT 2.2MF | 20% 50V |
| | | | | C139 | 1-124-925-11 | ELECT 2.2MF | 20% 50V |
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The components identified by shading and marked Δ are critical for safety.
Replace only with the part number specified.

Les composants identifiés par une trame et une marque Δ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

| REF.NO. | PART NO. | DESCRIPTION | REMARK | REF.NO. | PART NO. | DESCRIPTION | REMARK |
|---------|--------------|--|---------|---------|--------------|--|----------|
| C140 | 1-163-021-91 | CERAMIC CHIP 0.01MF | 10% 50V | C339 | 1-163-021-91 | CERAMIC CHIP 0.01MF | 10% 50V |
| C141 | 1-128-551-11 | ELECT 22MF | 20% 50V | C340 | 1-163-038-91 | CERAMIC CHIP 0.1MF | 25V |
| C147 | 1-164-665-11 | CERAMIC CHIP 0.039MF | 10% 50V | C341 | 1-163-021-91 | CERAMIC CHIP 0.01MF | 10% 50V |
| C149 | 1-163-101-00 | CERAMIC CHIP 22PF | 5% 50V | C344 | 1-104-658-91 | ELECT 47MF | 20% 50V |
| C150 | 1-163-101-00 | CERAMIC CHIP 22PF | 5% 50V | C345 | 1-163-139-00 | CERAMIC CHIP 820PF | 10% 50V |
| C151 | 1-163-009-91 | CERAMIC CHIP 0.001MF | 10% 50V | C347 | 1-163-021-91 | CERAMIC CHIP 0.01MF | 10% 50V |
| C152 | 1-126-964-11 | ELECT 10MF | 20% 50V | C348 | 1-163-031-91 | CERAMIC CHIP 0.01MF | 50V |
| C153 | 1-163-470-91 | CERAMIC CHIP 15PF | 5% 50V | | | (KV-M2170A/M2171A/M2170B/M2171B/M2170D/M2171D/M2170E/M2171E) | |
| C154 | 1-163-031-91 | CERAMIC CHIP 0.01MF | 50V | C349 | 1-128-551-11 | ELECT 22MF | 20% 50V |
| C155 | 1-163-038-91 | CERAMIC CHIP 0.1MF | 25V | | | (KV-M2170A/M2171A/M2170B/M2171B/M2170D/M2171D/M2170E/M2171E) | |
| C157 | 1-163-038-91 | CERAMIC CHIP 0.1MF | 25V | C350 | 1-163-004-11 | CERAMIC CHIP 0.1MF | 10% 25V |
| C158 | 1-124-927-11 | ELECT 4.7MF | 20% 50V | C351 | 1-163-017-00 | CERAMIC CHIP 0.0047MF | 10% 50V |
| C161 | 1-163-021-91 | CERAMIC CHIP 0.01MF | 10% 50V | C353 | 1-163-117-00 | CERAMIC CHIP 100PF | 5% 50V |
| | | (KV-M2170A/M2171A/M2170B/M2171B/M2170D/M2171D/M2170E/M2171E) | | C355 | 1-163-071-91 | CERAMIC CHIP 0.01MF | 50V |
| C162 | 1-104-658-91 | ELECT 47MF | 20% 16V | C358 | 1-163-021-91 | CERAMIC CHIP 0.01MF | 10% 100V |
| C164 | 1-162-638-11 | CERAMIC CHIP 1MF | 16V | C359 | 1-126-964-11 | ELECT 10MF | 20% 50V |
| | | (KV-M2170A/M2171A/M2170B/M2171B/M2170D/M2171D/M2170E/M2171E) | | C360 | 1-163-021-91 | CERAMIC CHIP 10000PF | 10% 100V |
| C165 | 1-104-658-91 | ELECT 47MF | 20% 16V | C401 | 1-104-658-91 | ELECT 47MF | 20% 16V |
| C166 | 1-104-658-91 | ELECT 100MF | 20% 10V | C402 | 1-163-009-91 | CERAMIC CHIP 0.001MF | 10% 50V |
| | | (KV-M2170A/M2171A/M2170B/M2171B/M2170D/M2171D/M2170E/M2171E) | | C404 | 1-163-038-91 | CERAMIC CHIP 0.1MF | 25V |
| C167 | 1-163-009-11 | CERAMIC CHIP 0.001MF | 10% 50V | C405 | 1-163-038-91 | CERAMIC CHIP 0.1MF | 25V |
| C168 | 1-163-205-00 | CERAMIC CHIP 0.001MF | 10% 50V | C406 | 1-124-927-11 | ELECT 4.7MF | 20% 50V |
| C200 | 1-163-071-91 | CERAMIC CHIP 0.01MF | 10% 50V | C407 | 1-104-666-11 | ELECT 220MF | 20% 25V |
| C300 | 1-126-934-11 | ELECT 220MF | 20% 16V | C408 | 1-126-941-11 | ELECT 470MF | 20% 25V |
| C301 | 1-163-077-00 | CERAMIC CHIP 0.1MF | 10% 25V | C410 | 1-163-038-91 | CERAMIC CHIP 0.1MF | 25V |
| C302 | 1-163-035-00 | CERAMIC CHIP 0.047MF | 50V | C412 | 1-163-038-91 | CERAMIC CHIP 0.1MF | 25V |
| C304 | 1-163-059-91 | CERAMIC CHIP 0.01MF | 10% 50V | C413 | 1-124-927-11 | ELECT 4.7MF | 20% 50V |
| C305 | 1-124-925-11 | ELECT 2.2MF | 20% 50V | C415 | 1-163-009-91 | CERAMIC CHIP 0.001MF | 10% 50V |
| C306 | 1-130-494-11 | FILM 0.082MF | 5% 50V | C416 | 1-163-031-91 | CERAMIC CHIP 0.01MF | 50V |
| C307 | 1-163-038-91 | CERAMIC CHIP 0.1MF | 25V | C417 | 1-163-031-91 | CERAMIC CHIP 0.01MF | 50V |
| C308 | 1-163-021-91 | CERAMIC CHIP 0.01MF | 10% 50V | C418 | 1-163-205-00 | CERAMIC CHIP 0.001MF | 10% 50V |
| C309 | 1-124-927-11 | ELECT 4.7MF | 20% 50V | C500 | 1-130-489-00 | FILM 0.033MF | 5% 50V |
| C310 | 1-163-077-00 | CERAMIC CHIP 0.1MF | 10% 25V | C501 | 1-124-927-11 | ELECT 4.7MF | 20% 50V |
| C312 | 1-164-004-11 | CERAMIC CHIP 0.1MF | 10% 25V | C502 | 1-163-077-91 | CERAMIC CHIP 0.1MF | 50V |
| C313 | 1-163-145-00 | CERAMIC CHIP 0.0015MF | 5% 50V | C503 | 1-126-952-11 | ELECT 1000MF | 20% 35V |
| C314 | 1-163-077-91 | CERAMIC CHIP 0.1MF | 50V | C504 | 1-124-122-11 | ELECT 100MF | 20% 50V |
| C315 | 1-163-038-91 | CERAMIC CHIP 0.1MF | 25V | C505 | 1-126-941-11 | ELECT 470MF | 20% 25V |
| C316 | 1-163-038-91 | CERAMIC CHIP 0.1MF | 25V | C506 | 1-163-009-91 | CERAMIC CHIP 0.001MF | 10% 50V |
| C317 | 1-163-038-91 | CERAMIC CHIP 0.1MF | 25V | C507 | 1-124-903-11 | ELECT 1MF | 20% 50V |
| C318 | 1-163-038-91 | CERAMIC CHIP 0.1MF | 25V | C508 | 1-130-785-11 | MYLAR 0.47MF | 10% 100V |
| C319 | 1-163-038-91 | CERAMIC CHIP 0.1MF | 25V | C509 | 1-163-035-00 | CERAMIC CHIP 0.047MF | 50V |
| C320 | 1-163-038-91 | CERAMIC CHIP 0.1MF | 25V | C600 | 1-126-967-11 | ELECT 47MF | 20% 50V |
| C321 | 1-124-927-11 | ELECT 4.7MF | 20% 50V | C601 | 1-136-516-12 | FILM 0.1MF | 20% 300V |
| C323 | 1-163-163-91 | CERAMIC CHIP 18PF | 5% 50V | C602 | 1-136-516-12 | FILM 0.1MF | 20% 300V |
| C324 | 1-163-119-00 | CERAMIC CHIP 120PF | 5% 50V | C603 | 1-162-599-12 | CERAMIC 0.0047MF | 250V |
| C325 | 1-163-035-00 | CERAMIC CHIP 0.1MF | 10% 25V | C604 | 1-162-599-12 | CERAMIC 0.0047MF | 250V |
| C326 | 1-164-004-11 | CERAMIC CHIP 0.1MF | 10% 25V | C606 | 1-113-473-11 | CAP, ELECT 180MF | |
| C327 | 1-163-005-91 | CERAMIC CHIP 470PF | 10% 50V | C607 | 1-104-666-11 | ELECT 220MF | 20% 25V |
| C328 | 1-163-035-00 | CERAMIC CHIP 0.047MF | 50V | C608 | 1-126-964-11 | ELECT 10MF | 20% 50V |
| C329 | 1-163-016-00 | CERAMIC CHIP 0.0039MF | 10% 50V | C609 | 1-109-921-11 | CERAMIC 0.0015MF | 10% 500V |
| C330 | 1-164-004-11 | CERAMIC CHIP 0.1MF | 10% 25V | C610 | 1-104-665-11 | ELECT 100MF | 20% 25V |
| C332 | 1-163-038-91 | CERAMIC CHIP 0.1MF | 25V | C611 | 1-126-964-11 | ELECT 10MF | 20% 50V |
| C333 | 1-163-033-91 | CERAMIC CHIP 0.022MF | 50V | C612 | 1-161-742-00 | CERAMIC 0.0022MF | 30% 300V |
| C335 | 1-163-021-91 | CERAMIC CHIP 0.01MF | 10% 50V | C613 | 1-161-742-00 | CERAMIC 0.0022MF | 30% 300V |
| C336 | 1-162-638-11 | CERAMIC CHIP 1MF | 16V | C614 | 1-136-538-11 | FILM 0.001MF | 3% 2KV |
| C337 | 1-162-638-11 | CERAMIC CHIP 1MF | 16V | C615 | 1-164-232-11 | CERAMIC CHIP 0.01MF | 10% 50V |
| C338 | 1-128-551-11 | ELECT 22MF | 20% 50V | C618 | 1-162-116-00 | CERAMIC 680PF | 10% 2KV |
| | | | | C619 | 1-102-228-00 | CERAMIC 470PF | 10% 500V |



The components identified by shading and marked  are critical for safety.
Replace only with the part number specified.

Les composants identifiés par une trame et une marque  sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifique.

| REF.NO. | PART NO. | DESCRIPTION | REMARK | REF.NO. | PART NO. | DESCRIPTION | REMARK |
|------------|--------------|---|--------|---------------|---------------|--|--------|
| C620 | 1-124-347-00 | ELECT 100MF 20% | 160V | < CONNECTOR > | | | |
| C621 | 1-126-942-61 | ELECT 1000MF 20% | 25V | CN001 | *1-568-880-51 | PIN, CONNECTOR 5P | |
| C622 | 1-111-041-51 | ELECT 1000MF 20% | 16V | CN201 | *1-564-506-11 | PLUG, CONNECTOR 3P | |
| C625 | 1-164-222-11 | CERAMIC CHIP 0.22MF | 25V | CN501 | *1-580-844-11 | PIN, CONNECTOR (POWER) | |
| C626 | 1-104-658-91 | ELECT 100MF 20% | 16V | CN503 | *1-508-786-00 | PIN, CONNECTOR (5MM PITCH) 2P | |
| C627 | 1-104-658-91 | ELECT 100MF 20% | 16V | CN801 | *1-580-798-11 | CONNECTOR PIN (DY) 6P | |
| C800 | 1-126-772-11 | ELECT 1MF 20% | 250V | CNA81 | *1-568-881-51 | PIN, CONNECTOR 6P | |
| C801 | 1-129-746-00 | FILM 0.039MF 10% | 400V | CNA82 | *1-568-880-51 | PIN, CONNECTOR 5P | |
| C803 | 1-136-109-00 | FILM 0.68MF 5% | 200V | < DIODE > | | | |
| C804 | 1-124-902-00 | ELECT 0.47MF 20% | 50V | D001 | 8-719-052-94 | DIODE LR5360-DG | |
| C806 | 1-102-244-00 | CERAMIC 220PF 10% | 500V | D002 | 8-759-157-40 | IC μ PC574J | |
| C807 | 1-107-652-11 | ELECT 10MF 20% | 250V | D004 | 8-719-109-85 | DIODE RD5.1ESB2 | |
| C808 | 1-136-079-00 | FILM 0.01MF 3% | 2KV | D005 | 8-719-991-33 | DIODE 1SS133T-77 | |
| C809 | 1-161-754-00 | CERAMIC 0.001MF 10% | 2KV | D006 | 8-719-991-33 | DIODE 1SS133T-77 | |
| C810 | 1-129-702-00 | FILM 0.001MF 10% | 400V | D014 | 8-719-991-33 | DIODE 1SS133T-77 | |
| C811 | 1-102-228-00 | CERAMIC 470PF 10% | 500V | D100 | 8-719-991-33 | DIODE 1SS133T-77 | |
| C815 | 1-162-116-00 | CERAMIC 680PF 10% | 2KV | D102 | 8-719-903-27 | DIODE 1SS168 (KV-M2170A/M2171A/M2170B/M2171B/M2170D/ M2171D/M2170E/M2171E) | |
| C816 | 1-162-114-00 | CERAMIC 0.0047MF 10% | 2KV | D104 | 8-719-903-27 | DIODE 1SS168 (KV-M2170A/M2171A/M2170B/M2171B/M2170D/ M2171D/M2170E/M2171E) | |
| C817 | 1-136-559-11 | MYLAR 0.0047MF 10% | 400V | D105 | 8-719-991-33 | DIODE 1SS133T-77 (KV-M2170K/M2171K/ M2171KR) | |
| C818 | 1-136-933-11 | FILM 1MF 5% | 100V | D106 | 8-719-991-33 | DIODE 1SS133T-77 (KV-M2170K/M2171K/M2171KR) | |
| C819 | 1-162-318-11 | CERAMIC 0.001MF 10% | 500V | D107 | 8-719-991-33 | DIODE 1SS133T-77 | |
| C820 | 1-126-951-11 | ELECT 220MF 20% | 35V | D109 | 8-719-820-71 | DIODE 1SV214 | |
| C822 | 1-104-696-11 | FILM 0.015MF 10% | 100V | D301 | 8-719-991-33 | DIODE 1SS133T-77 | |
| C823 | 1-106-375-12 | MYLAR 0.022MF 10% | 250V | D302 | 8-719-991-33 | DIODE 1SS133T-77 | |
| C824 | 1-106-367-00 | MYLAR 0.01MF 10% | 400V | D305 | 1-247-821-91 | CARBON 390 5% 1/4W | |
| C827 | 1-164-182-11 | CERAMIC CHIP 0.0033MF 10% | 50V | D307 | 8-719-991-33 | DIODE 1SS133T-77 (KV-M2170A/M2171A/M2170B/M2171B/M2170D/ M2171D/M2170E/M2171E) | |
| C828 | 1-124-903-11 | ELECT 1MF 20% | 50V | D308 | 8-719-991-33 | DIODE 1SS133T-77 (KV-M2170A/M2171A/M2170B/M2171B/M2170D/ M2171D/M2170E/M2171E) | |
| C829 | 1-163-063-91 | CERAMIC CHIP 0.022MF 10% | 50V | D401 | 8-719-109-97 | DIODE RD6.8ESB2 | |
| < FILTER > | | | | D402 | 8-719-109-97 | DIODE RD6.8ESB2 | |
| CF101 | 1-404-801-31 | TRAP, CERAMIC (KV-M2170A/M2171A/M2170D/M2171D/M2170E/ M2171E/M2170K/M2171K/M2171KR) | | D403 | 8-719-109-97 | DIODE RD6.8ESB2 | |
| | 1-409-429-11 | TRAP, CERAMIC (KV-M2170L/M2171L/M2170U/M2171U) | | D404 | 8-719-109-97 | DIODE RD6.8ESB2 | |
| | 1-409-430-11 | TRAP, CERAMIC (KV-M2170B/M2171B) | | D405 | 8-719-109-97 | DIODE RD6.8ESB2 | |
| CF102 | 1-409-327-00 | TRAP, CERAMIC (6.5 MHz) (KV-M2170K/M2171K/M2171KR) | | D406 | 8-719-109-97 | DIODE RD6.8ESB2 | |
| CF103 | 1-567-100-00 | FILTER, CERAMIC (KV-M2170L/M2171L/M2170U/M2171U) | | D407 | 8-719-109-97 | DIODE RD6.8ESB2 | |
| | 1-760-106-11 | FILTER, CERAMIC (KV-M2170A/M2171A/M2170B/M2171B/M2170D/ M2171D/M2170E/M2171E/M2170K/M2171K/ M2171KR) | | D408 | 8-719-109-97 | DIODE RD6.8ESB2 | |
| CF104 | 1-567-101-11 | FILTER, CERAMIC (KV-M2170K/M2171K/M2171KR) | | D409 | 8-719-991-33 | DIODE 1SS133T-77 | |
| CF105 | 1-760-154-11 | TRAP, CERAMIC (KV-M2170A/M2171A/M2170B/M2171B/M2170D/ M2171D/M2170E/M2171E) | | D410 | 8-719-109-97 | DIODE RD6.8ESB2 | |
| SWF101 | 1-579-120-11 | FILTER, SURFACE WAVE (KV-M2170A/M2171A/M2170D/M2171D/M2170E/ M2171E) | | D414 | 8-719-991-33 | DIODE 1SS133T-77 | |
| | 1-579-273-11 | FILTER, SURFACE WAVE (KV-M2170B/M2171B) | | D501 | 8-719-302-43 | DIODE EL1Z | |
| | 1-579-414-11 | FILTER, SURFACE WAVE (KV-M2170K/M2171K/M2171KR) | | D600 | 8-719-991-33 | DIODE 1SS133T-77 | |
| | 1-760-711-11 | FILTER, SURFACE WAVE (KV-M2170L/M2171L/M2170U/M2171U) | | D601 | 8-719-046-77 | DIODE EM1-V1 | |
| SWF102 | 1-760-722-11 | FILTER, SURFACE WAVE (KV-M2170A/M2171A/M2170B/M2171B/M2170D/ M2171D/M2170E/M2171E) | | D602 | 8-719-312-61 | DIODE EU-1Z | |
| | | | | D603 | 8-719-046-78 | DIODE EG-1Z-V1 | |
| | | | | D604 | 8-719-312-61 | DIODE EU-1Z | |
| | | | | D605 | 8-719-312-61 | DIODE EU-1Z | |
| | | | | D606 | 8-719-979-85 | DIODE EGP20G | |
| | | | | D607 | 8-719-302-43 | DIODE EL1Z | |
| | | | | D608 | 8-719-980-78 | DIODE ERA83-006 | |
| | | | | D610 | 8-719-025-88 | DIODE GBU4JL-6088 | |

The components identified by shading and marked **A** are critical for safety.
Replace only with the part number specified.

Les composants identifiés par une trame et une marque **A** sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

A

| REF.NO. | PART NO. | DESCRIPTION | REMARK | REF.NO. | PART NO. | DESCRIPTION | REMARK |
|------------------|--------------|--|--------|----------------|---|--|--------|
| D611 | 8-719-991-33 | DIODE 1SS133T-77 | | L108 | 1-408-405-00 | INDUCTOR 4.7UH (KV-M2170K/M2171K/M2171KR) | |
| D801 | 8-719-950-57 | DIODE BYD33G | | | | | |
| D802 | 8-719-302-43 | DIODE EL1Z | | 1-408-408-00 | INDUCTOR 8.2UH (KV-M2170A/M2171A/M2171B/M2170D/ M2171D/M2170E/M2171E/M2170L/M2171L/ M2170U/M2171U) | | |
| D803 | 8-719-945-80 | DIODE ERC06-15S | | | | | |
| D804 | 8-719-028-72 | DIODE RGP02-17EL-6433 | | L109 | 1-403-686-12 | COIL | |
| D805 | 8-719-928-08 | DIODE ERD28-08S | | L110 | 1-410-673-31 | INDUCTOR 68UH | |
| D806 | 8-719-302-43 | DIODE EL1Z | | L111 | 1-410-665-41 | INDUCTOR 15UH (KV-M2170A/M2171A/M2170B/M2171B/M2170D/ M2171D/M2170E/M2171E) | |
| D807 | 8-719-991-33 | DIODE 1SS133T-77 | | L112 | 1-408-417-00 | INDUCTOR 47UH | |
| < FUSE > | | | | L113 | 1-410-985-41 | INDUCTOR CHIP 0.22UH (KV-M2170A/M2171A/M2170B/M2171B/M2170D/ M2171D/M2170E/M2171E/M2170K/M2171K/ M2171KR/M2170L/M2171L) | |
| F601 | 1-576-231-11 | FUSE (B.B.C.) 4A 150V | | 1-216-295-00 | METAL GLAZE 0 5% 1/10W (KV-M2170U/M2171U) | | |
| | 1-533-230-11 | HOLDER, FUSE ; F601 | | | | | |
| < FERRITE BEAD > | | | | L201 | 1-412-531-31 | INDUCTOR 33UH | |
| FB001 | 1-410-397-21 | FERRITE BEAD INDUCTOR 1.1UH | | L602 | 1-408-609-41 | INDUCTOR 33UH | |
| FB002 | 1-410-397-21 | FERRITE BEAD INDUCTOR 1.1UH | | L603 | 1-410-669-31 | INDUCTOR 33UH | |
| FB003 | 1-410-397-31 | FERRITE BEAD INDUCTOR 1.1UH | | L604 | 1-408-417-00 | INDUCTOR 47UH | |
| FB601 | 1-410-397-21 | FERRITE BEAD INDUCTOR 1.1UH | | L800 | 1-412-553-41 | INDUCTOR 3.3MMH | |
| FB603 | 1-410-397-21 | FERRITE BEAD INDUCTOR 1.1UH | | | | | |
| FB604 | 1-410-397-21 | FERRITE BEAD INDUCTOR 1.1UH | | L801 | 1-420-872-00 | COIL,AIR CORE | |
| FB605 | 1-410-396-41 | FERRITE BEAD INDUCTOR 0.45UH | | L802 | 1-407-365-00 | COIL,CHOKE | |
| FB801 | 1-410-397-31 | FERRITE BEAD INDUCTOR 1.1UH | | L803 | 1-459-390-00 | COIL (WITH CORE) | |
| < IC > | | | | L804 | 1-459-105-21 | COIL (WITH CORE) | |
| IC001 | 8-759-354-63 | IC SAA5290ZP/006 (KV-M2171KR) | | L805 | 1-412-531-21 | INDUCTOR 33UH | |
| | 8-759-354-64 | IC SAA5290ZP/007 (KV-M2171A/M2171B/M2171D/M2171E/M2171K/ M2171L/M2171U) | | L806 | 1-459-652-12 | COIL, HORIZONTAL LINEARITY | |
| | 8-759-354-82 | IC SAA5288ZP/007 (KV-M2170A/M2170B/M2170D/M2170E/M2170K/ M2170L/M2170U) | | < IC LINK > | | | |
| IC002 | 8-759-280-74 | IC ST24C02CB1 | | F602 | 1-532-686-11 | LINK, IC 2.7A (ICP-M75) | |
| IC003 | 8-747-905-11 | IC SBX1790-11 | | F603 | 1-532-637-00 | LINK, IC 1.0A (ICP-M25) | |
| IC101 | 8-759-333-17 | IC TDA9812 (KV-M2170B/M2171B) | | < TRANSISTOR > | | | |
| | 8-759-333-19 | IC TDA9806 (KV-M2170A/M2171A/M2170D/M2171D/M2170E/ M2171E/M2170K/M2171K/M2171KR/ M2170L/M2171L/M2170U/M2171U) | | Q001 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE (KV-M2170A/M2171A/M2170B/M2171B/M2170D/ M2171D/M2170E/M2171E) | |
| IC301 | 8-759-333-44 | IC MC44007P (KV-M2170A/M2171A/M2170E/M2171E/M2170L/ M2171L/M2170U/M2171U) | | 8-729-922-66 | TRANSISTOR 2SC2410SN (KV-M2170K/M2171K/M2171KR/M2170L/ M2171L/M2170U/M2171U) | | |
| | 8-759-333-45 | IC MC44002P (KV-M2170B/M2171B/M2170D/M2171D/M2170K/ M2171K/M2171KR) | | Q002 | 8-729-173-38 | TRANSISTOR 2SA733-K (KV-M2170A/M2171A/M2170B/M2171B/M2170D/ M2171D/M2170E/M2171E) | |
| IC302 | 8-759-333-46 | IC MC44140P | | 8-729-026-41 | TRANSISTOR 2SA933AS-QRT (KV-M2170K/M2171K/M2171KR/M2170L/ M2171L/M2170U/M2171U) | | |
| IC401 | 8-759-041-82 | IC TDA1013B | | Q005 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE (KV-M2170A/M2171A/M2170B/M2171B/M2170D/ M2171D/M2170E/M2171E) | |
| | 4-203-017-01 | HEATSINK, VR ; IC401 | | 8-729-920-74 | TRANSISTOR 2SC2412K-QR (KV-M2170K/M2171K/M2171KR/M2170L/ M2171L/M2170U/M2171U) | | |
| IC501 | 8-759-192-71 | IC STV9379 | | Q006 | 8-729-173-38 | TRANSISTOR 2SA733-K (KV-M2170A/M2171A/M2170B/M2171B/M2170D/ M2171D/M2170E/M2171E) | |
| IC601 | 8-749-011-02 | IC STR-S5706 | | 8-729-026-41 | TRANSISTOR 2SA933AS-QRT (KV-M2170K/M2171K/M2171KR/M2170L/ M2171L/M2170U/M2171U) | | |
| IC603 | 8-759-337-99 | IC TDA8139 | | Q007 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE | |
| < SOCKET > | | | | Q008 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE | |
| J201 | 1-568-267-21 | JACK | | | | | |
| J401 | 1-561-534-00 | SOCKET 21P | | | | | |
| < COIL > | | | | | | | |
| L101 | 1-410-669-31 | INDUCTOR 33UH | | | | | |
| L105 | 1-408-411-00 | INDUCTOR 15UH | | | | | |

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| REF.NO. | PART NO. | DESCRIPTION | REMARK | REF.NO. | PART NO. | DESCRIPTION | REMARK |
|---------|--------------|---|--------|--------------|--------------|--|--------|
| Q009 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE | | Q116 | 8-729-900-89 | TRANSISTOR DTC144ES (KV-M2170A/M2171A/M2170B/M2171B/M2170D/ M2171D/M2170E/M2171E) | |
| Q010 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE (KV-M2170A/M2171A/M2170B/M2171B/M2170D/ M2171D/M2170E/M2171E) | | Q300 | 8-729-900-80 | TRANSISTOR DTC114ES | |
| | 8-729-920-74 | TRANSISTOR 2SC2412K-QR (KV-M2170K/M2171K/M2171KR/M2170L/ M2171L/M2170U/M2171U) | | Q301 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE | |
| Q011 | 8-729-900-89 | TRANSISTOR DTC144ES | | Q302 | 8-729-900-80 | TRANSISTOR DTC114ES | |
| Q012 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE (KV-M2170A/M2171A/M2170B/M2171B/M2170D/ M2171D/M2170E/M2171E) | | Q303 | 8-729-900-80 | TRANSISTOR DTC114ES | |
| | 8-729-920-74 | TRANSISTOR 2SC2412K-QR (KV-M2170K/M2171K/M2171KR/M2170L/ M2171L/M2170U/M2171U) | | Q304 | 8-729-900-80 | TRANSISTOR DTC114ES | |
| Q013 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE (KV-M2170A/M2171A/M2170B/M2171B/M2170D/ M2171D/M2170E/M2171E) | | Q305 | 8-729-900-80 | TRANSISTOR DTC114ES | |
| | 8-729-920-74 | TRANSISTOR 2SC2412K-QR (KV-M2170K/M2171K/M2171KR/M2170L/ M2171L/M2170U/M2171U) | | Q306 | 8-729-900-80 | TRANSISTOR DTC114ES | |
| Q014 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE (KV-M2170A/M2171A/M2170B/M2171B/M2170D/ M2171D/M2170E/M2171E) | | Q307 | 8-729-119-76 | TRANSISTOR 2SA1175-HFE (KV-M2170A/M2171A/M2170B/M2171B/M2170D/ M2171D/M2170E/M2171E) | |
| | 8-729-920-74 | TRANSISTOR 2SC2412K-QR (KV-M2170K/M2171K/M2171KR/M2170L/ M2171L/M2170U/M2171U) | | Q308 | 8-729-901-01 | TRANSISTOR DTC144EK | |
| Q015 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE (KV-M2170A/M2171A/M2170B/M2171B/M2170D/ M2171D/M2170E/M2171E) | | Q401 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE | |
| | 8-729-920-74 | TRANSISTOR 2SC2412K-QR (KV-M2170K/M2171K/M2171KR/M2170L/ M2171L/M2170U/M2171U) | | Q402 | 8-729-173-38 | TRANSISTOR 2SA733-K (KV-M2170A/M2171A/M2170B/M2171B/M2170D/ M2171D/M2170E/M2171E) | |
| Q016 | 8-729-216-22 | TRANSISTOR 2SA1162-G | | | 8-729-216-22 | TRANSISTOR 2SA1162-G (KV-M2170K/M2171K/M2171KR/M2170L/ M2171L/M2170U/M2171U) | |
| Q100 | 8-729-901-01 | TRANSISTOR DTC144EK | | Q403 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE (KV-M2170A/M2171A/M2170B/M2171B/M2170D/ M2171D/M2170E/M2171E) | |
| Q101 | 8-729-900-80 | TRANSISTOR DTC114ES (KV-M2170A/M2171A/M2170B/M2171B/M2170D/ M2171D/M2170E/M2171E) | | | 8-729-920-74 | TRANSISTOR 2SC2412K-QR (KV-M2170K/M2171K/M2171KR/M2170L/ M2171L/M2170U/M2171U) | |
| Q102 | 8-729-900-80 | TRANSISTOR DTC114ES (KV-M2170A/M2171A/M2170B/M2171B/M2170D/ M2171D/M2170E/M2171E) | | Q404 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE (KV-M2170A/M2171A/M2170B/M2171B/M2170D/ M2171D/M2170E/M2171E) | |
| Q103 | 8-729-900-80 | TRANSISTOR DTC114ES (KV-M2170A/M2171A/M2170B/M2171B/M2170D/ M2171D/M2170E/M2171E) | | | 8-729-920-74 | TRANSISTOR 2SC2412K-QR (KV-M2170K/M2171K/M2171KR/M2170L/ M2171L/M2170U/M2171U) | |
| Q105 | 8-729-901-01 | TRANSISTOR DTC144EK | | Q600 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE | |
| Q107 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE | | Q602 | 8-729-900-65 | TRANSISTOR DTA144ES | |
| Q109 | 8-729-022-54 | TRANSISTOR 2SC3779C, D-AA (KV-M2170A/M2171A/M2170B/M2171B/M2170D/ M2171D/M2170E/M2171E) | | Q801 | 8-729-140-96 | TRANSISTOR 2SD774-34 | |
| Q110 | 8-729-901-01 | TRANSISTOR DTC144EK | | Q802 | 8-729-033-85 | TRANSISTOR S2000N-16E30A | |
| Q111 | 8-729-900-89 | TRANSISTOR DTC144ES (KV-M2170K/M2171K/M2171KR) | | Q803 | 8-729-900-89 | TRANSISTOR DTC144ES | |
| Q112 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE | | Q804 | 8-729-202-03 | TRANSISTOR 2SD1408-Y | |
| Q113 | 8-729-900-89 | TRANSISTOR DTC144ES (KV-M2170K/M2171K/M2171KR) | | Q805 | 8-729-140-96 | TRANSISTOR 2SD774-34 | |
| Q114 | 8-729-901-01 | TRANSISTOR DTC144EK | | < RESISTOR > | | | |
| Q115 | 8-729-173-38 | TRANSISTOR 2SA9733-K (KV-M2170A/M2171A/M2170B/M2171B/M2170D/ M2171D/M2170E/M2171E) | | JR004 | 1-216-296-91 | METAL GLAZE 0 5% 1/8W | |
| | | | | JR007 | 1-216-295-00 | METAL GLAZE 0 5% 1/10W | |
| | | | | JR008 | 1-216-295-00 | METAL GLAZE 0 5% 1/10W | |
| | | | | JR009 | 1-216-295-00 | METAL GLAZE 0 5% 1/10W | |
| | | | | JR012 | 1-216-295-00 | METAL GLAZE 0 5% 1/10W | |
| | | | | JR013 | 1-216-295-00 | METAL GLAZE 0 5% 1/10W | |
| | | | | JR014 | 1-216-296-91 | METAL GLAZE 0 5% 1/8W | |
| | | | | JR015 | 1-216-295-00 | METAL GLAZE 0 5% 1/10W | |
| | | | | JR017 | 1-216-295-00 | METAL GLAZE 0 5% 1/10W | |
| | | | | JR018 | 1-216-296-91 | METAL GLAZE 0 5% 1/8W | |
| | | | | JR019 | 1-216-296-91 | METAL GLAZE 0 5% 1/8W | |
| | | | | JR020 | 1-216-295-00 | METAL GLAZE 0 5% 1/10W | |
| | | | | JR021 | 1-216-296-91 | METAL GLAZE 0 5% 1/8W | |
| | | | | JR026 | 1-216-296-91 | METAL GLAZE 0 5% 1/8W | |
| | | | | JR027 | 1-216-296-91 | METAL GLAZE 0 5% 1/8W | |
| | | | | R001 | 1-216-222-91 | METAL GLAZE 10K 5% 1/8W | |
| | | | | R002 | 1-216-057-91 | METAL GLAZE 2.2K 5% 1/10W | |
| | | | | R004 | 1-216-238-00 | METAL GLAZE 47K 5% 1/8W | |
| | | | | R005 | 1-216-081-00 | METAL GLAZE 22K 5% 1/10W | |

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| REF.NO. | PART NO. | DESCRIPTION | REMARK |
|---------|--------------|---------------------|--------|
| R006 | 1-216-089-00 | METAL GLAZE 47K 5% | 1/10W |
| R008 | 1-216-031-91 | METAL GLAZE 180 5% | 1/10W |
| R009 | 1-216-049-91 | METAL GLAZE 1K 5% | 1/10W |
| R010 | 1-216-041-00 | METAL GLAZE 470 5% | 1/10W |
| R011 | 1-216-049-91 | METAL GLAZE 1K 5% | 1/10W |
| R012 | 1-216-089-00 | METAL GLAZE 47K 5% | 1/10W |
| R013 | 1-216-049-91 | METAL GLAZE 1K 5% | 1/10W |
| R014 | 1-216-065-00 | METAL GLAZE 4.7K 5% | 1/10W |
| R015 | 1-216-065-00 | METAL GLAZE 4.7K 5% | 1/10W |
| R016 | 1-216-025-91 | METAL GLAZE 100 5% | 1/10W |
| R017 | 1-216-025-91 | METAL GLAZE 100 5% | 1/10W |
| R018 | 1-216-081-00 | METAL GLAZE 22K 5% | 1/10W |
| R019 | 1-216-174-91 | METAL GLAZE 100 5% | 1/8W |
| R020 | 1-216-089-91 | METAL GLAZE 47K 5% | 1/10W |
| R021 | 1-216-174-91 | METAL GLAZE 100 5% | 1/8W |
| R022 | 1-216-295-00 | METAL GLAZE 0 5% | 1/10W |
| R024 | 1-216-089-00 | METAL GLAZE 47K 5% | 1/10W |
| R025 | 1-216-222-91 | METAL GLAZE 10K 5% | 1/8W |
| R026 | 1-216-081-00 | METAL GLAZE 22K 5% | 1/10W |
| R027 | 1-216-206-00 | METAL GLAZE 2.2K 5% | 1/8W |
| R028 | 1-216-081-00 | METAL GLAZE 22K 5% | 1/10W |
| R029 | 1-216-081-00 | METAL GLAZE 22K 5% | 1/10W |
| R030 | 1-215-900-11 | METAL OXIDE 22K 5% | 2W F |
| R031 | 1-216-065-00 | METAL GLAZE 4.7K 5% | 1/10W |
| R032 | 1-216-049-91 | METAL GLAZE 1K 5% | 1/10W |
| R033 | 1-216-049-91 | METAL GLAZE 1K 5% | 1/10W |
| R034 | 1-247-855-91 | CARBON 10K 5% | 1/4W |
| R035 | 1-247-863-91 | CARBON 22K 5% | 1/4W |
| R036 | 1-216-059-91 | METAL GLAZE 2.7K 5% | 1/10W |
| R037 | 1-216-057-91 | METAL GLAZE 2.2K 5% | 1/10W |
| R039 | 1-216-089-00 | METAL GLAZE 47K 5% | 1/10W |
| R040 | 1-216-065-00 | METAL GLAZE 4.7K 5% | 1/10W |
| R042 | 1-216-230-00 | METAL GLAZE 22K 5% | 1/8W |
| R044 | 1-216-073-00 | METAL GLAZE 10K 5% | 1/10W |
| R045 | 1-216-081-00 | METAL GLAZE 22K 5% | 1/10W |
| R046 | 1-216-105-91 | METAL GLAZE 220K 5% | 1/10W |
| R047 | 1-216-077-00 | METAL GLAZE 15K 5% | 1/10W |
| R049 | 1-216-041-00 | METAL GLAZE 470 5% | 1/10W |
| R052 | 1-216-238-91 | METAL GLAZE 47K 5% | 1/8W |
| R055 | 1-216-057-91 | METAL GLAZE 2.2K 5% | 1/10W |
| R060 | 1-216-061-00 | METAL GLAZE 3.3K 5% | 1/10W |
| R061 | 1-216-073-00 | METAL GLAZE 10K 5% | 1/10W |
| R062 | 1-216-073-00 | METAL GLAZE 10K 5% | 1/10W |
| R063 | 1-216-061-00 | METAL GLAZE 3.3K 5% | 1/10W |
| R064 | 1-216-073-00 | METAL GLAZE 10K 5% | 1/10W |
| R065 | 1-216-073-00 | METAL GLAZE 10K 5% | 1/10W |
| R066 | 1-216-073-00 | METAL GLAZE 10K 5% | 1/10W |
| R067 | 1-216-081-00 | METAL GLAZE 22K 5% | 1/10W |
| R068 | 1-216-073-00 | METAL GLAZE 10K 5% | 1/10W |
| R069 | 1-247-863-91 | CARBON 22K 5% | 1/4W |
| R070 | 1-216-065-00 | METAL GLAZE 4.7K 5% | 1/10W |
| R071 | 1-216-081-00 | METAL GLAZE 22K 5% | 1/10W |
| R072 | 1-216-230-00 | METAL GLAZE 22K 5% | 1/8W |
| R073 | 1-216-089-00 | METAL GLAZE 47K 5% | 1/10W |
| R074 | 1-216-073-00 | METAL GLAZE 10K 5% | 1/10W |
| R075 | 1-249-436-11 | CARBON 39K 5% | 1/4W |
| R078 | 1-216-071-91 | METAL GLAZE 8.2K 5% | 1/10W |
| R079 | 1-216-061-00 | METAL GLAZE 3.3K 5% | 1/10W |
| R080 | 1-216-057-91 | METAL GLAZE 2.2K 5% | 1/10W |
| R081 | 1-249-438-11 | CARBON 56K 5% | 1/4W |

| REF.NO. | PART NO. | DESCRIPTION | REMARK |
|---------|--------------|---------------------|---|
| R088 | 1-216-061-91 | METAL GLAZE 3.3K 5% | 1/10W |
| R089 | 1-216-061-91 | METAL GLAZE 3.3K 5% | 1/10W |
| R090 | 1-216-061-91 | METAL GLAZE 3.3K 5% | 1/10W |
| R091 | 1-249-427-11 | CARBON 6.8K 5% | 1/4W |
| R093 | 1-216-065-00 | METAL GLAZE 4.7K 5% | 1/10W |
| R094 | 1-216-081-00 | METAL GLAZE 22K 5% | 1/10W |
| R095 | 1-216-081-00 | METAL GLAZE 22K 5% | 1/10W |
| R096 | 1-216-033-00 | METAL GLAZE 220 5% | 1/10W |
| R097 | 1-216-051-91 | METAL GLAZE 1.2K 5% | 1/10W |
| R098 | 1-216-051-91 | METAL GLAZE 1.2K 5% | 1/10W |
| R099 | 1-216-200-91 | METAL GLAZE 1.2K 5% | 1/8W |
| R102 | 1-216-234-91 | METAL GLAZE 33K 5% | 1/8W |
| R104 | 1-216-059-91 | METAL GLAZE 2.7K 5% | 1/10W (KV-M2170A/M2171A/M2170B/M2171B/M2170D/ M2171D/M2170E/M2171E) |
| R105 | 1-216-025-91 | METAL GLAZE 100 5% | 1/10W (KV-M2170A/M2171A/M2170B/M2171B/M2170D/ M2171D/M2170E/M2171E) |
| R106 | 1-216-053-00 | METAL GLAZE 1.5K 5% | 1/10W (KV-M2170A/M2171A/M2170B/M2171B/M2170D/ M2171D/M2170E/M2171E) |
| R107 | 1-216-017-91 | METAL GLAZE 47 5% | 1/10W (KV-M2170A/M2171A/M2170B/M2171B/M2170D/ M2171D/M2170E/M2171E) |
| R108 | 1-216-067-00 | METAL GLAZE 5.6K 5% | 1/10W |
| R109 | 1-216-025-91 | METAL GLAZE 100 5% | 1/10W (KV-M2170A/M2171A/M2170B/M2171B/M2170D/ M2171D/M2170E/M2171E) |
| R110 | 1-216-101-00 | METAL GLAZE 150K 5% | 1/10W |
| R111 | 1-216-085-00 | METAL GLAZE 33K 5% | 1/10W |
| R112 | 1-216-057-91 | METAL GLAZE 2.2K 5% | 1/10W (KV-M2170A/M2171A/M2170B/M2171B/M2170D/ M2171D/M2170E/M2171E) |
| R113 | 1-216-057-91 | METAL GLAZE 2.2K 5% | 1/10W (KV-M2170A/M2171A/M2170B/M2171B/M2170D/ M2171D/M2170E/M2171E) |
| R114 | 1-216-073-00 | METAL GLAZE 10K 5% | 1/10W (KV-M2170A/M2171A/M2170B/M2171B/M2170D/ M2171D/M2170E/M2171E) |
| R115 | 1-216-057-91 | METAL GLAZE 2.2K 5% | 1/10W (KV-M2170A/M2171A/M2170B/M2171B/M2170D/ M2171D/M2170E/M2171E) |
| R116 | 1-216-049-91 | METAL GLAZE 1K 5% | 1/10W |
| R117 | 1-216-089-00 | METAL GLAZE 47K 5% | 1/10W |
| R118 | 1-216-075-00 | METAL GLAZE 12K 5% | 1/10W |
| R122 | 1-216-025-91 | METAL GLAZE 100 5% | 1/10W (KV-M2170K/M2171K/M2171KR) |
| | 1-216-029-00 | METAL GLAZE 150 5% | 1/10W (KV-M2170A/M2171A/M2170B/M2171B/M2170D/ M2171D/M2170E/M2171E/M2170L/M2171L/ M2170U/M2171U) |
| R123 | 1-216-089-00 | METAL GLAZE 47K 5% | 1/10W |
| R124 | 1-216-025-91 | METAL GLAZE 100 5% | 1/10W |
| R125 | 1-216-025-91 | METAL GLAZE 100 5% | 1/10W |
| R126 | 1-216-025-91 | METAL GLAZE 100 5% | 1/10W |
| R127 | 1-216-180-00 | METAL GLAZE 180 5% | 1/10W |
| R128 | 1-216-073-00 | METAL GLAZE 10K 5% | 1/10W |
| R133 | 1-249-429-11 | CARBON 10K 5% | 1/10W |

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| REF.NO. | PART NO. | DESCRIPTION | REMARK | REF.NO. | PART NO. | DESCRIPTION | REMARK |
|---------|--------------|--|--------|---------|--------------|---|--------|
| R134 | 1-216-029-00 | METAL GLAZE 150 5% 1/10W (KV-M2170L/M2171L/M2170U/M2171U) | | R178 | 1-216-055-00 | METAL GLAZE 1.8K 5% 1/10W | |
| | 1-216-031-91 | METAL GLAZE 180 5% 1/10W (KV-M2170A/M2171A/M2170B/M2171B/M2170D/ M2171D/M2170E/M2171E/M1440K/M1441K/ M1441KR) | | R179 | 1-216-212-91 | METAL GLAZE 3.9K 5% 1/8W | |
| R136 | 1-216-061-00 | METAL GLAZE 3.3K 5% 1/10W | | R180 | 1-216-049-00 | METAL GLAZE 1K 5% 1/10W (KV-M2170A/M2171A/M2170B/M2171B/M2170D/ M2171D/M2170E/M2171E) | |
| R137 | 1-216-109-00 | METAL GLAZE 330K 5% 1/10W | | R205 | 1-247-741-11 | CARBON 150 5% 1/2W | |
| R138 | 1-216-081-00 | METAL GLAZE 22K 5% 1/10W | | R301 | 1-216-073-00 | METAL GLAZE 10K 5% 1/10W | |
| R141 | 1-216-057-91 | METAL GLAZE 2.2K 5% 1/10W | | R302 | 1-216-037-91 | METAL GLAZE 330 5% 1/10W | |
| R142 | 1-216-057-91 | METAL GLAZE 2.2K 5% 1/10W | | R303 | 1-216-090-00 | METAL GLAZE 51K 5% 1/10W | |
| R143 | 1-216-295-00 | METAL GLAZE 0 5% 1/10W (KV-M2170A/M2171A/M2170B/M2171B/M2170D/ M2171D/M2170E/M2171E/M2170L/M2171L/ M2170U/M2171U) | | R304 | 1-216-025-91 | METAL GLAZE 100 5% 1/10W | |
| R144 | 1-216-206-00 | METAL GLAZE 2.2K 5% 1/8W (KV-M2170K/M2171K/M2171KR) | | R305 | 1-216-025-91 | METAL GLAZE 100 5% 1/10W | |
| R145 | 1-216-206-00 | METAL GLAZE 2.2K 5% 1/8W (KV-M2170K/M2171K/M2171KR) | | R306 | 1-216-113-91 | METAL GLAZE 470K 5% 1/10W | |
| R146 | 1-216-043-91 | METAL GLAZE 560 5% 1/10W | | R307 | 1-216-121-91 | METAL GLAZE 1M 5% 1/10W | |
| R147 | 1-216-043-91 | METAL GLAZE 560 5% 1/10W (KV-M2170K/M2171K/M2171KR) | | R308 | 1-216-234-91 | METAL GLAZE 33K 5% 1/8W | |
| R149 | 1-216-057-91 | METAL GLAZE 2.2K 5% 1/10W (KV-M2170K/M2171K/M2171KR) | | R309 | 1-216-121-91 | METAL GLAZE 1M 5% 1/10W | |
| R151 | 1-216-097-00 | METAL GLAZE 100K 5% 1/10W | | R310 | 1-216-089-00 | METAL GLAZE 47K 5% 1/10W | |
| R153 | 1-216-097-00 | METAL GLAZE 100K 5% 1/10W | | R311 | 1-216-093-00 | METAL GLAZE 68K 5% 1/10W | |
| R154 | 1-216-081-00 | METAL GLAZE 22K 5% 1/10W | | R312 | 1-216-089-00 | METAL GLAZE 47K 5% 1/10W | |
| R155 | 1-216-081-00 | METAL GLAZE 22K 5% 1/10W | | R313 | 1-216-045-00 | METAL GLAZE 680 5% 1/10W | |
| R157 | 1-216-049-91 | METAL GLAZE 1K 5% 1/10W (KV-M2170A/M2171A/M2170B/M2171B/M2170D/ M2171D/M2170E/M2171E) | | R314 | 1-216-045-00 | METAL GLAZE 680 5% 1/10W | |
| R158 | 1-216-031-91 | METAL GLAZE 180 5% 1/10W (KV-M2170A/M2171A/M2170B/M2171B/M2170D/ M2171D/M2170E/M2171E) | | R315 | 1-216-045-00 | METAL GLAZE 680 5% 1/10W | |
| | 1-216-039-00 | METAL GLAZE 390 5% 1/10W (KV-M2170K/M2171K/M2171KR/M2170L/ M2171L/M2170U/M2171U) | | R316 | 1-216-033-00 | METAL GLAZE 220 5% 1/10W | |
| R159 | 1-216-061-00 | METAL GLAZE 3.3K 5% 1/10W | | R317 | 1-216-182-00 | METAL GLAZE 220 5% 1/8W | |
| R160 | 1-216-238-91 | METAL GLAZE 47K 5% 1/8W | | R318 | 1-216-019-91 | METAL GLAZE 56 5% 1/10W | |
| R161 | 1-216-295-00 | METAL GLAZE 0 5% 1/10W (KV-M2170A/M2171A/M2170D/M2171D/M2170E/ M2171E/M2170K/M2171K/M2171KR/ M2170L/M2171L/M2170U/M2171U) | | R322 | 1-216-022-91 | METAL GLAZE 75 5% 1/10W | |
| R162 | 1-216-017-91 | METAL GLAZE 47 5% 1/10W (KV-M2170A/M2171A/M2170B/M2171B/M2170D/ M2171D/M2170E/M2171E) | | R323 | 1-216-089-00 | METAL GLAZE 47K 5% 1/10W | |
| R163 | 1-249-407-11 | CARBON 150 5% 1/4W | | R325 | 1-216-089-00 | METAL GLAZE 47K 5% 1/10W | |
| R167 | 1-216-246-91 | METAL GLAZE 100K 5% 1/8W | | R326 | 1-216-115-91 | METAL GLAZE 560K 5% 1/10W | |
| R168 | 1-249-407-11 | CARBON 150 5% 1/4W | | R327 | 1-216-097-91 | METAL GLAZE 100 5% 1/10W | |
| R169 | 1-216-073-00 | METAL GLAZE 10K 5% 1/10W (KV-M2170A/M2171A/M2170B/M2171B/M2170D/ M2171D/M2170E/M2171E) | | R333 | 1-216-037-91 | METAL GLAZE 330 5% 1/10W | |
| R170 | 1-216-063-91 | METAL GLAZE 3.9K 5% 1/10W (KV-M2170A/M2171A/M2170B/M2171B/M2170D/ M2171D/M2170E/M2171E) | | R334 | 1-216-033-00 | METAL GLAZE 220 5% 1/10W | |
| R171 | 1-216-069-00 | METAL GLAZE 6.8K 5% 1/10W (KV-M2170A/M2171A/M2170B/M2171B/M2170D/ M2171D/M2170E/M2171E) | | R335 | 1-216-295-00 | METAL GLAZE 0 5% 1/10W | |
| R175 | 1-216-049-91 | METAL GLAZE 1K 5% 1/10W | | R336 | 1-216-296-91 | METAL GLAZE 0 5% 1/8W | |
| R176 | 1-216-049-91 | METAL GLAZE 1K 5% 1/10W | | R337 | 1-216-295-00 | METAL GLAZE 0 5% 1/10W | |
| R177 | 1-216-049-91 | METAL GLAZE 1K 5% 1/10W | | R339 | 1-216-061-00 | METAL GLAZE 3.3K 5% 1/10W | |
| | | | | R340 | 1-216-121-91 | METAL GLAZE 1M 5% 1/10W | |
| | | | | R341 | 1-216-075-00 | METAL GLAZE 12K 5% 1/10W | |
| | | | | R342 | 1-216-186-91 | METAL GLAZE 330 5% 1/8W | |
| | | | | R343 | 1-216-295-00 | METAL GLAZE 0 5% 1/10W | |
| | | | | R344 | 1-216-295-00 | METAL GLAZE 0 5% 1/10W | |
| | | | | R345 | 1-216-089-00 | METAL GLAZE 47K 5% 1/10W | |
| | | | | R347 | 1-216-041-00 | METAL GLAZE 470 5% 1/10W (KV-M2170A/M2171A/M2170B/M2171B/M2170D/ M2171D/M2170E/M2171E) | |
| | | | | R348 | 1-216-073-00 | METAL GLAZE 10K 5% 1/10W (KV-M2170A/M2171A/M2170B/M2171B/M2170D/ M2171D/M2170E/M2171E) | |
| | | | | R349 | 1-216-105-91 | METAL GLAZE 220K 5% 1/10W (KV-M2170A/M2171A/M2170B/M2171B/M2170D/ M2171D/M2170E/M2171E) | |
| | | | | R350 | 1-216-033-00 | METAL GLAZE 220 5% 1/10W (KV-M2170A/M2171A/M2170B/M2171B/M2170D/ M2171D/M2170E/M2171E) | |
| | | | | R351 | 1-216-292-11 | METAL GLAZE 8.2M 5% 1/8W | |
| | | | | R352 | 1-216-262-91 | METAL GLAZE 470K 5% 1/8W | |
| | | | | R353 | 1-247-804-11 | CARBON 75 5% 1/4W | |
| | | | | R354 | 1-216-025-91 | METAL GLAZE 100 5% 1/10W | |
| | | | | R355 | 1-216-121-91 | METAL GLAZE 1M 5% 1/10W | |
| | | | | R356 | 1-216-121-91 | METAL GLAZE 1M 5% 1/10W | |
| | | | | R357 | 1-216-095-00 | METAL GLAZE 82K 5% 1/10W | |

The components identified by shading and marked **A** are critical for safety.
Replace only with the part number specified.

Les composants identifiés par une trame et une marque **A** sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

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| REF.NO. | PART NO. | DESCRIPTION | REMARK | REF.NO. | PART NO. | DESCRIPTION | REMARK |
|---------|--------------|--|--------|-----------------------|--------------|--|--------|
| R358 | 1-216-009-91 | METAL GLAZE 22 5% 1/10W | | R804 | 1-217-778-11 | FUSIBLE 1K 5% 1W F | |
| R359 | 1-216-089-00 | METAL GLAZE 47K 5% 1/10W | | R806 | 1-216-349-00 | METAL OXIDE 1 5% 1W F | |
| R361 | 1-216-022-91 | METAL GLAZE 75 5% 1/10W | | R807 | 1-247-795-91 | METAL GLAZE 33 5% 1/10W | |
| R362 | 1-216-022-91 | METAL GLAZE 75 5% 1/10W | | R809 | 1-215-916-51 | METAL OXIDE 680 5% 3W F | |
| R363 | 1-216-022-91 | METAL GLAZE 75 5% 1/10W | | R810 | 1-247-895-91 | CARBON 470K 5% 1/4W | |
| R401 | 1-216-041-00 | METAL GLAZE 470 5% 1/10W | | R811 | 1-215-869-11 | METAL OXIDE 1K 5% 1W F | |
| R402 | 1-249-431-11 | CARBON 15K 5% 1/4W | | R812 | 1-215-869-11 | METAL OXIDE 1K 5% 1W F | |
| R403 | 1-249-431-11 | CARBON 15K 5% 1/4W | | R814 | 1-217-811-11 | FUSIBLE 0.47 5% 1/4W | |
| R405 | 1-249-389-11 | CARBON 4.7 5% 1/4W F | | R815 | 1-216-101-00 | METAL GLAZE 150K 5% 1/10W | |
| R406 | 1-216-091-00 | METAL GLAZE 56K 5% 1/10W | | R816 | 1-216-369-00 | METAL OXIDE 1 5% 2W F | |
| R407 | 1-216-041-00 | METAL GLAZE 470 5% 1/10W | | R817 | 1-216-447-00 | METAL OXIDE 27 5% 2W F | |
| R408 | 1-216-033-00 | METAL GLAZE 220 5% 1/10W | | R818 | 1-202-830-00 | SOLID 10K 10% 1/2W | |
| R410 | 1-247-804-11 | METAL GLAZE 75 5% 1/4W (KV-M2170A/M2171A/M2170B/M2171B/M2170D/ M2171D/M2170E/M2171E/M2170K/M2171K/ M2171KR) | | R819 | 1-249-441-11 | CARBON 100K 5% 1/4W | |
| | 1-247-698-11 | METAL GLAZE 68 5% 1/4W (KV-M2170L/M2171L/M2170U/M2171U) | | R820 | 1-249-935-11 | CARBON 3.3K 5% 1/4W F | |
| R411 | 1-216-085-00 | METAL GLAZE 33K 5% 1/10W | | R822 | 1-216-101-00 | METAL GLAZE 150K 5% 1/10W | |
| R412 | 1-216-105-91 | METAL GLAZE 220K 5% 1/10W | | R823 | 1-216-232-91 | METAL GLAZE 470 5% 1/8W | |
| R413 | 1-216-097-00 | METAL GLAZE 100K 5% 1/10W | | R824 | 1-216-125-00 | METAL GLAZE 1.5M 5% 1/10W | |
| R414 | 1-216-097-00 | METAL GLAZE 100K 5% 1/10W | | R825 | 1-216-105-91 | METAL GLAZE 220K 5% 1/10W | |
| R415 | 1-216-222-91 | METAL GLAZE 10K 5% 1/8W | | R828 | 1-247-899-11 | CARBON 680K 5% 1/4W | |
| R416 | 1-216-081-00 | METAL GLAZE 22K 5% 1/10W | | < VARIABLE RESISTOR > | | | |
| R501 | 1-208-806-11 | METAL CHIP 10K 0.50% 1/10W | | RV102 | 1-241-765-11 | RES, ADJ, METAL GLAZE 22K (KV-M2170A/M2171A/M2170B/M2171B/M2170D/ M2171D/M2170E/M2171E) | |
| R502 | 1-216-677-11 | METAL CHIP 12K 0.50% 1/10W | | RV801 | 1-241-630-11 | RES, ADJ, CARBON 10K | |
| R503 | 1-216-081-00 | METAL GLAZE 22K 5% 1/10W | | < SWITCH > | | | |
| R504 | 1-216-095-00 | METAL GLAZE 82K 5% 1/10W | | S001 | 1-571-532-21 | SWITCH, TACTIL | |
| R505 | 1-216-075-00 | METAL GLAZE 12K 5% 1/10W | | S002 | 1-571-532-21 | SWITCH, TACTIL | |
| R507 | 1-216-350-11 | METAL OXIDE 1.2 5% 1W F | | S003 | 1-571-532-21 | SWITCH, TACTIL | |
| R508 | 1-215-865-11 | METAL OXIDE 220 5% 1W F | | S004 | 1-571-532-21 | SWITCH, TACTIL | |
| R509 | 1-249-383-11 | CARBON 1.5 5% 1/4W F | | S005 | 1-571-532-21 | SWITCH, TACTIL | |
| R600 | 1-216-365-00 | METAL OXIDE 0.47 5% 2W F | | S006 | 1-571-532-21 | SWITCH, TACTIL | |
| R601 | 1-205-909-11 | WIREWOUND 1.3 5% 10W | | S601 | 1-571-433-21 | SWITCH, PUSH (AC POWER) | |
| R603 | 1-215-858-51 | METAL OXIDE 15 5% 1W F | | < TRANSFORMER > | | | |
| R604 | 1-215-927-00 | METAL OXIDE 47K 5% 3W F | | T601 | 1-427-962-11 | TRANSFORMER, LINE FILTER | |
| R606 | 1-249-441-11 | CARBON 100K 5% 1/4W | | T602 | 1-429-207-11 | TRANSFORMER, CONVERTER | |
| R607 | 1-216-366-51 | METAL OXIDE 0.56 5% 2W F | | T801 | 1-437-090-00 | HDT | |
| R608 | 1-216-647-11 | METAL CHIP 680 0.50% 1/10W | | T802 | 1-453-199-11 | TRANSFORMER ASSY, FLYBACK (HX-1741/02E) | |
| R609 | 1-215-859-00 | METAL OXIDE 22 5% 1W F | | < THERMISTOR > | | | |
| R610 | 1-249-419-11 | CARBON 1.5K 5% 1/4W | | THP601 | 1-808-059-31 | THERMISTOR (POSITIVE) | |
| R611 | 1-215-430-00 | METAL 2.4K 1% 1/4W | | < TUNER > | | | |
| R612 | 1-202-713-00 | SOLID 1W 10% 1/2W | | TU101 | 1-693-303-11 | TUNER (TELE1X001A) (KV-M2170A/M2171A) | |
| R613 | 1-218-265-11 | METAL 8.2M 5% 1W | | | 1-693-331-00 | TUNER (BT-AC401) (KV-M2170B/M2171B/M2170D/M2171D/M2170E/ M2171E/M2170K/M2171K/M2171KR/ M2170L/M2171L/M2170U/M2171U) | |
| R615 | 1-217-371-00 | FUSIBLE 0.47 10% 1/4W F | | < CRYSTAL > | | | |
| R617 | 1-216-659-11 | METAL CHIP 2.2K 0.50% 1/10W | | X001 | 1-578-774-11 | VIBRATOR, CRYSTAL | |
| R618 | 1-216-659-11 | METAL CHIP 2.2K 0.50% 1/10W | | X302 | 1-760-710-21 | VIBRATOR, CRYSTAL (KV-M2170K/M2171K/M2171KR/M2170L/ M2171L/M2170U/M2171U) | |
| R620 | 1-215-479-00 | METAL 270K 1% 1/4W | | | | | |
| R621 | 1-249-429-11 | CARBON 10K 5% 1/4W | | | | | |
| R622 | 1-247-895-91 | METAL GLAZE 470K 5% 1/4W | | | | | |
| R623 | 1-216-081-00 | METAL GLAZE 22K 5% 1/10W | | | | | |
| R624 | 1-216-033-00 | METAL GLAZE 220 5% 1/10W | | | | | |
| R625 | 1-216-073-00 | METAL GLAZE 10K 5% 1/10W | | | | | |
| R626 | 1-216-089-00 | METAL GLAZE 47K 5% 1/10W | | | | | |
| R627 | 1-216-346-00 | METAL OXIDE 0.56 5% 1W F | | | | | |
| R630 | 1-249-401-11 | CARBON 47 5% 1/4W | | | | | |
| R800 | 1-215-887-00 | METAL OXIDE 150 5% 2W F | | | | | |
| R801 | 1-247-891-00 | CARBON 330K 5% 1/4W | | | | | |
| R802 | 1-247-807-31 | CARBON 100 5% 1/4W | | | | | |
| R803 | 1-216-081-00 | METAL GLAZE 22K 5% 1/10W | | | | | |


C

The components identified by shading and marked Δ are critical for safety.
Replace only with the part number specified.

Les composants identifiés par une trame et une marque Δ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

| REF.NO. | PART NO. | DESCRIPTION | REMARK | REF.NO. | PART NO. | DESCRIPTION | REMARK |
|----------------|-------------------|---|--------|-----------------------|--------------|----------------------------|--------|
| *A-1638-074-A | C BOARD, COMPLETE | (KV-M2170A/M2171A/ ***** M2170B/M2171B/ M2170D/M2171D/ M2170E/M2171E) | | < RESISTOR > | | | |
| *A-1638-068-A | C BOARD, COMPLETE | (KV-M2170K/M2171K/ ***** M2171KR/M2170L/ M2171L/M2170U/ M2171U) | | R701 | 1-249-417-11 | CARBON 1K 5% 1/4W | |
| < CAPACITOR > | | | | R702 | 1-249-417-11 | CARBON 1K 5% 1/4W | |
| C701 | 1-102-117-00 | CERAMIC 820PF 10% 50V (KV-M2170K/M2171K/M2171KR/M2170L/ M2171L/M2170U/M2171U) | | R705 | 1-247-791-91 | CARBON 22 5% 1/4W | |
| C702 | 1-102-117-00 | CERAMIC 820PF 10% 50V (KV-M2170K/M2171K/M2171KR/M2170L/ M2171L/M2170U/M2171U) | | R706 | 1-247-791-91 | CARBON 22 5% 1/4W | |
| C703 | 1-102-117-00 | CERAMIC 820PF 10% 50V (KV-M2170K/M2171K/M2171KR/M2170L/ M2171L/M2170U/M2171U) | | R707 | 1-247-791-91 | CARBON 22 5% 1/4W | |
| C704 | 1-102-824-00 | CERAMIC 470PF 5% 50V | | R708 | 1-247-815-91 | CARBON 220 5% 1/4W | |
| C705 | 1-102-824-00 | CERAMIC 470PF 5% 50V | | R709 | 1-247-815-91 | CARBON 220 5% 1/4W | |
| C706 | 1-102-824-00 | CERAMIC 470PF 5% 50V | | R710 | 1-247-815-91 | CARBON 220 5% 1/4W | |
| C707 | 1-136-189-00 | FILM 0.1MF 10% 250V | | R711 | 1-249-417-11 | CARBON 1K 5% 1/4W | |
| C709 | 1-162-114-00 | CERAMIC 0.0047MF 2KV | | R714 | 1-249-417-11 | CARBON 1K 5% 1/4W | |
| C710 | 1-104-660-91 | ELECT 47MF 20% 16V | | R715 | 1-249-417-11 | CARBON 1K 5% 1/4W | |
| < CONNECTOR > | | | | R716 | 1-249-417-11 | CARBON 1K 5% 1/4W | |
| CNC71 | *1-568-881-51 | PIN, CONNECTOR 6P | | R717 | 1-247-758-11 | CARBON 3.3K 5% 1/2W | |
| CNC72 | *1-568-880-51 | PIN, CONNECTOR 5P | | R718 | 1-247-758-11 | CARBON 3.3K 5% 1/2W | |
| CNC73 | 1-695-915-11 | TAB (CONTACT) | | R719 | 1-247-758-11 | CARBON 3.3K 5% 1/2W | |
| CNC76 | 1-695-915-11 | TAB (CONTACT) | | R720 | 1-216-487-11 | METAL OXIDE 12K 5% 3W F | |
| < DIODE > | | | | R721 | 1-216-487-11 | METAL OXIDE 12K 5% 3W F | |
| D701 | 8-719-991-33 | DIODE 1SS133T-77 | | R722 | 1-216-487-11 | METAL OXIDE 12K 5% 3W F | |
| D702 | 8-719-991-33 | DIODE 1SS133T-77 | | R724 | 1-202-814-11 | SOLID 33K 10% 1/2W | |
| D703 | 8-719-991-33 | DIODE 1SS133T-77 | | R725 | 1-202-846-00 | SOLID 470K 10% 1/2W | |
| D704 | 8-719-991-33 | DIODE 1SS133T-77 | | R726 | 1-202-844-00 | SOLID 330K 10% 1/2W | |
| D705 | 8-719-991-33 | DIODE 1SS133T-77 | | R727 | 1-202-848-00 | SOLID 680K 10% 1/2W | |
| D706 | 8-719-991-33 | DIODE 1SS133T-77 | | R729 | 1-216-348-00 | METAL OXIDE 0.82 5% 1W F | |
| D707 | 8-719-991-33 | DIODE 1SS133T-77 | | R734 | 1-247-815-91 | CARBON 220 5% 1/4W | |
| D708 | 8-719-991-33 | DIODE 1SS133T-77 | | R735 | 1-247-815-91 | CARBON 220 5% 1/4W | |
| D709 | 8-719-991-33 | DIODE 1SS133T-77 | | R736 | 1-247-815-91 | CARBON 220 5% 1/4W | |
| D716 | 8-719-991-33 | DIODE 1SS133T-77 | | R744 | 1-247-756-11 | CARBON 2.2K 5% 1/2W | |
| D717 | 8-719-054-81 | DIODE 1SS292 | | R745 | 1-247-756-11 | CARBON 2.2K 5% 1/2W | |
| D718 | 8-719-991-33 | DIODE 1SS133T-77 | | R746 | 1-247-756-11 | CARBON 2.2K 5% 1/2W | |
| D719 | 8-719-054-81 | DIODE 1SS292 | | < VARIABLE RESISTOR > | | | |
| D723 | 8-719-991-33 | DIODE 1SS133T-77 | | RV701 | 1-230-641-11 | RES, ADJ, METAL GLAZE 2.2M | |
| D724 | 8-719-054-81 | DIODE 1SS292 | | RV702 | 1-241-656-21 | RES, ADJ, METAL FILM 110M | |
| < CRT SOCKET > | | | | ***** | | | |
| < TRANSISTOR > | | | | | | | |
| Q701 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE | | | | | |
| Q702 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE | | | | | |
| Q703 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE | | | | | |
| Q704 | 8-729-906-70 | TRANSISTOR BF871-127 | | | | | |
| Q705 | 8-729-906-70 | TRANSISTOR BF871-127 | | | | | |
| Q706 | 8-729-906-70 | TRANSISTOR BF871-127 | | | | | |
| Q707 | 8-729-200-17 | TRANSISTOR 2SA1091-O | | | | | |
| Q708 | 8-729-200-17 | TRANSISTOR 2SA1091-O | | | | | |
| Q709 | 8-729-200-17 | TRANSISTOR 2SA1091-O | | | | | |

The components identified by shading and marked  are critical for safety.
Replace only with the part number specified.

Les composants identifiés par une trame et une marque  sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

| REF.NO. | PART NO. | DESCRIPTION | REMARK | REF.NO. | PART NO. | DESCRIPTION | REMARK |
|------------------------|--------------|---|--------|--|--|-------------|--------|
| MISCELLANEOUS ***** | | | | ACCESSORIES AND PACKING MATERIALS ***** | | | |
| | 1-452-032-00 | MAGNET, DISK; 10MM Ø | | 4-203-127-41 | MANUAL, INSTRUCTION (KV-M2170A/M2171A) | | |
| | 1-452-094-00 | MAGNET, ROTATABLE DISK; 15MM Ø | | | (ITALIAN) | | |
| | 1-452-277-00 | MAGNET, BMC | | 4-203-127-51 | MANUAL, INSTRUCTION (KV-M2170B/M2171B) | | |
| | 1-453-199-11 | TRANSFORMER ASSY, FLYBACK (NK-1741/M2171D) | | | (FRENCH/GERMAN/ITALIAN) | | |
| | 1-460-090-21 | COIL, DEGAUSSING (KV-M2170A/M2170B/M2171D/M2170E/M2171E/ M2170K/M2171K/M2171KR/M2170L/ M2171L/M2170U/M2171U) | | 4-203-127-11 | MANUAL, INSTRUCTION (KV-M2170D/M2171D) | | |
| | 1-426-145-00 | COIL, DEGAUSSING (KV-M2171A/M2171B/M2170D) | | 4-203-130-11 | MANUAL, INSTRUCTION (KV-M2170D/M2171D) | | |
| | 1-503-258-21 | SPEAKER | | | (GERMAN) | | |
| | 1-540-006-12 | CAP ASSY, HIGH-VOLTAGE (KV-M2170A/M2171A/M2170B/M2171B/M2170D/ M2171D/M2170E/M2171E) | | 4-203-127-71 | MANUAL, INSTRUCTION (KV-M2170E/M2171E) | | |
| | 1-540-007-11 | CAP ASSY, HIGH-VOLTAGE (KV-M2170K/M2171K/M2171KR/M2170L/ M2171L/M2170U/M2171U) | | | (SPANISH) | | |
| | 1-571-433-21 | SWITCH, PUSH (AC POWER) | | 4-203-127-81 | MANUAL, INSTRUCTION (KV-M2170E/M2171E) | | |
| | 1-690-270-21 | CORD, POWER (WITH CONNECTOR) 2.5A/250V (KV-M2170A/M2171A/M2170B/M2171B/M2170D/ M2171D/M2170E/M2171E) | | | (PORTUGUESE) | | |
| | 1-590-460-11 | CORD, POWER (WITH CONNECTOR) 7.0A/250V (KV-M2170K/M2171K/M2171KR) | | 4-203-122-91 | MANUAL, INSTRUCTION (KV-M2170I/M2171K) | | |
| | 1-590-762-11 | CORD, POWER (WITH PLUG) 2.5A/250V (KV-M2170L/M2171L/M2170U/M2171U) | | | (ENGLISH/RUSSIAN/CZECH/HUNGARIAN/ POLISH/BULGARIAN) | | |
| | 1-693-303-11 | TUNER (TELE1X001A) (KV-M2170A/M2171A/M2171KR) | | 4-203-154-91 | MANUAL, INSTRUCTION (KV-M2171KR) | | |
| | 8-598-331-00 | TUNER (BT-AC401) (KV-M2170B/M2171B/M2170D/M2171D/M2170E/ M2171E) | | | (BULGARIAN/ENGLISH/RUSSIAN) | | |
| | 1-693-310-11 | TUNER (TELE4X002A) (KV-M2170K/M2171K) | | 4-203-122-61 | MANUAL, INSTRUCTION (KV-M2170L/M2171L/M2170U/M2171U) | | |
| | 1-693-302-11 | TUNER (UV1315) (KV-M2170L/M2171L) | | | (ENGLISH) | | |
| | 8-598-333-00 | TUNER (BT-AU601) (KV-M2170U/M2171U) | | *4-203-124-01 | INDIVIDUAL CARTON (KV-M2170A/M2170K/M2171K/M2171KR/ M2170L/M2171L) | | |
| | 8-451-295-45 | DEFLECTION YOKE (Y21PF2BA) | | *4-203-124-11 | INDIVIDUAL CARTON (KV-M2171A/M2170B/M2171B/M2170D/M2171D/ M2170E/M2171E) | | |
| | 8-738-784-05 | PICTURE TUBE (SD-159) (AS1JH6K) | | *4-203-123-01 | INDIVIDUAL CARTON (KV-M2170U/M2171U) | | |
| ***** | | | | *4-203-111-01 | CUSHION (UPPER) (ASSY) (KV-M2170A/M2170K/M2171K/M2171KR/ M2170L/M2171L/M2170U/M2171U) | | |
| ***** | | | | *4-203-111-11 | CUSHION (UPPER) (ASSY) (KV-M2171A/M2170B/M2171B/M2170D/M2171D/ M2170E/M2171E) | | |
| ***** | | | | *4-203-112-01 | CUSHION (BOTTOM) (ASSY) (KV-M2170A/M2170K/M2171K/M2171KR/ M2170L/M2171L/M2170U/M2171U) | | |
| ***** | | | | *4-203-112-11 | CUSHION (BOTTOM) (ASSY) (KV-M2171A/M2170B/M2171B/M2170D/M2171D/ M2170E/M2171E) | | |
| ***** | | | | *4-042-477-01 | BAG, PROTECTION (KV-M2170A/M2171A/M2170B/M2171B/M2170D/ M2171D/M2170E/M2171E) | | |
| ***** | | | | *4-039-905-02 | BAG, PROTECTION (KV-M2170K/M2171K/M2171KR/M217L/ M2171L/M2170U/M2171U) | | |
| ***** | | | | REMOTE COMMANDER ***** | | | |
| ***** | | | | 1-473-194-11 | COMMANDER, STANDARD TYPE (RM-36) | | |
| ***** | | | | ***** | | | |